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THE REGULATION OF OIL AND GAS PIPELINES IN AUSTRALIA

by

(C) ROWLAND J. HARRISON

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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ABSTRACT

Oil and gas pipelines are a relatively recent phenomenon in Australia. In 1968, one crude oil trunk pipeline was operating. Now, there are crude oil or natural gas pipelines in operation or under construction in every mainland State.

These rapid developments have been accompanied by and, indeed, enabled by the establishment of a separate regulatory regime dealing with pipelines. American experience has shown that the control of pipelines may potentially lead to the control of the petroleum industry itself. The effectiveness of the Australian regulatory regime may, therefore, be critical to the proper regulation of the development and utilization of the country's petroleum resources.

The thesis examines that regime with a view to identifying the major issues involved in the regulation of oil and gas pipelines in the context of the construction and operational techniques employed by the industry, in light of the histories of the regulation of the industry in the United States of America and Canada and in terms of the Australian setting. The effectiveness of the present legislation in dealing with the issues so identified is assessed.

The general conclusion is that the legislation has not confronted these issues inasmuch as it merely *licenses*, rather than *regulates*, pipelines.

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CHAPTER I

INTRODUCTION

An oil and gas producing industry of any significance has emerged in Australia in only the past five or so years. Although there had been some production prior to 1969 - of both oil and gas in Queensland and of oil in Western Australia - that year witnessed the commencement of production from the major off-shore fields in Bass Strait and the connection of three State capitals to supplies of natural gas.(1) By 1970-71, indigenous crude oil was supplying 51 per cent of total Australian refinery input(2) and the share of total consumption of primary energy supplied by natural gas had risen to 3.4 per cent from practically zero as recently as 1967-68.(3) These proportions had risen to 67 per cent and 6.1 per cent respectively by 1972-73.(4)

Concurrently with these dramatic developments, a petroleum pipeline industry has also become established. At the time of writing, trunk pipelines supplying natural gas are operating in four States. The country's first interstate gas pipeline is under construction and with its projected completion in 1975 all mainland State capitals will be supplied with natural gas delivered by pipeline. Major trunk pipelines delivering crude oil are presently

operating in two States.

"Oil in the field tanks", Max W. Ball wrote in his 1940 classic study of the oil industry,(5) "is like a fat steer on the range; it needs to be taken thence and made into something useful. The task of taking it usually falls to a pipeline..." Although written with reference to oil, these words apply equally to natural gas and it follows from them that the control of pipelines may lead to the control of the oil and gas industry itself.

It is not surprising, therefore, that oil and gas pipelines should be subject to regulatory control and, indeed, the Parliaments of three States have enacted separate pipelines legislation for this purpose, while a fourth has substantially revised its existing petroleum legislation to provide for the licensing of trunk pipelines. In addition, three government pipeline corporations have been established by statute.(6)

It is this legislation, and the regulatory regime it establishes, that is the main subject of the present study. The aim, however, is broader than to simply examine the Australian pipeline legislation from the lawyer's point of view. The study is not a legal study in the "black letter law" sense of stating the law in a particular field and applying that law to given situations or, more simply, in the sense of stating the law of oil and gas pipelines. It is a policy-oriented

study which attempts to use the lawyer's method of analysis to identify the major issues involved in the regulation of oil and gas pipelines in the context of experience in other jurisdictions and of the measures that have been taken to date to deal with those issues.

The aim of the study, then, is to identify the major issues involved in the regulation of oil and gas pipelines. In a sense, the study is an attempt to answer the question of what really are the issues in this area rather than an attempt to offer solutions to those issues.

The need for this type of approach arises from what is submitted to have been a lack of proper appreciation of the issues to date. This has been particularly so on the part of the governments and legislators responsible for the present legislation, and probably stems from the fact that most of that legislation, although drafted in terms of general application, was considered in the context of proposals for particular pipelines. A number of instances will become apparent in the following pages and a few only need be mentioned at this point. First, there was a tendency in considering the present legislation to look to North American precedents without appreciating, on the one hand, those circumstances in the North American experience that are to be contrasted with the Australian setting and, on the other hand, that in some cases the legislation being compared to North American precedents

was in fact fundamentally different. Secondly, there seems to have been a general failure to appreciate the distinction between *regulating* an activity and *undertaking* that activity directly. And thirdly, there has been a failure to appreciate the different demands imposed on regulatory mechanisms by oil pipelines on the one hand and gas pipelines on the other.

A further word is necessary about this last point. The discussion in Chapters II and III will indicate that there are some fundamental differences between the operation of oil pipelines and the operation of gas pipelines and between the histories of the regulation of each in North America. These differences might call for different treatment of each in Australia, but the fact that they have not been widely appreciated in the Australian legislation to date suggests a caution about terminology in the following pages. The expressions "oil pipeline" and "gas pipeline" should be treated as being more or less mutually exclusive. The expressions "petroleum pipelines" or "oil and gas pipelines" are used where both are intended to be covered.

The study commences in Chapter II with an examination of the technical background to the construction and operation of pipelines and includes an examination of the structure of the pipeline industry. Clearly, if the real issues raised by the subject are to be identified

the regulation of the industry cannot be discussed properly in any context other than that of the way in which the industry operates.

Chapter III examines the American and Canadian experiences with the regulation of petroleum pipelines. These particular jurisdictions have been selected for essentially two reasons. First, they are the foreign jurisdictions to which Australia has looked primarily for precedents for the regulation of its oil and gas industry generally and the pipeline industry in particular. Secondly, each of those countries has a well established and extensive pipeline industry operating under a sophisticated, although not necessarily successful, regulatory regime. Greater attention is given to the American experience as it is in that country that major controversy has surrounded the regulation of the oil and gas pipeline industry. The history of that controversy is examined with a view to identifying the sorts of issues which experience has shown may emerge, rather than with a view to assessing the merits themselves of the controversy. It is the fact of the controversy that is important to the present study.

The aim of Chapter IV is to examine the Australian setting with a view to first identifying the basic contrasts with the American and Canadian experiences so that the value of precedents from those jurisdictions might be better appreciated. The Chapter then attempts

to identify the major issues in the regulation of oil and gas pipelines in Australia. It concludes with an examination of the extent to which these issues have been the subject of identifiable policies. It is, essentially, the backbone of the study as the comments on the Australian legislation in the following three Chapters generally depend for their efficacy on the validity of its conclusions.

Finally, a word about sources. The material in Chapters II and III has been based mainly on secondary sources such as American and Canadian writings. The remainder of the study is based almost entirely on the results of research from primary sources. These included the Australian legislation itself, parliamentary debates, government reports and documents, reports of the government pipeline authorities, studies on behalf of governments and correspondence with Australian government officials and petroleum companies.

FOOTNOTES - CHAPTER I

(1) The development of the Australian industry is discussed in more detail in Chapter IV, *infra*, at pp. 99 *et seq*.

(2) The Petroleum Information Bureau (Australia), *Oil and Australia: The Figures behind the Facts 1971*, at p. 6.

(3) The Petroleum Information Bureau (Australia), *Oil and Australia: The Figures behind the Facts 1973*, at p. 30.

(4) *Id.*, at pp. 6, 30.

(5) Ball, *This Fascinating Oil Business*, at p. 173 (1940).

(6) *See* further Chapter VI, *infra*, at pp. 187 *et seq*.

CHAPTER II

THE CONSTRUCTION AND OPERATION OF PIPELINES

Pipelining,[1] while sharing limited similarities with other forms of transportation such as railways,[2] is a distinct industry with its own peculiarities. This is evidenced partly by the very existence of the regulatory regime that is the subject of this study. However, mere acknowledgment of the existence of the problems and requirements of the industry is insufficient. Some understanding of the nature and operation of pipelines is necessary to any meaningful discussion of regulatory controls.

SECTION I

CONSTRUCTION OF PIPELINES

(i) Planning and Right-of-way Acquisition:

It seems to be generally true, with some exceptions, that the world's oil and gas reserves are located at vast distances from markets. It is this fact which creates the need for pipelines - among other means of transportation - in the petroleum industry. But while it may be too obvious for statement that the need for a pipe-

line arises from the need to move oil or gas to markets, the existence of such a need is only the first step in a long series of considerations involved in determining whether a particular pipeline is to be constructed.

An illustration is readily found in the Australian scene. As early as 1965, reserves of natural gas sufficient to supply both the Melbourne and Sydney markets were known to exist in Bass Strait. The possibility of a pipeline to Sydney was discussed shortly thereafter and led to intense negotiations towards the end of 1969 which made it appear that a start on construction was imminent. In fact, however, these negotiations proved abortive and it is now unlikely that a pipeline will ever be built from Bass Strait to Sydney. Instead, a gas line from the Moomba-Gidgealpa fields in South Australia to Sydney is presently under construction.(3)

Obviously, then, it is an oversimplification to say that reserves are known at A, an unsupplied market exists at B, and therefore a pipeline should be built from A to B. However, recognition of the possibility of supplying a market at B from reserves at A is the obvious first step in planning a pipeline. Invariably, the person to recognise this will be the discoverer of the reserves as he will be anxious to find a market as quickly as possible as it is not until the product of his discovery is marketed that he can realise any return on his

investment.[4] Thus, in the simplest situation, the discoverer himself will seek permission to construct a pipeline from reserves under his control to the nearest market of a size sufficient to justify the necessary additional investment in the pipeline. He may do this either within the framework of his existing organisation by simply establishing a "pipeline department" or by the incorporation of a subsiduary company to construct and operate pipelines.

The investment necessary for a pipeline, however, may be beyond the resources of the discoverer alone in which case he will seek alternative means of financing such a project. Several of these are available, some of which have already been employed in Australia.

The first is to promote the formation of an independent pipeline company which will attract outside investment, although the discoverer may hold a substantial interest. This method has been adopted for both the major pipelines in Queensland. Associated Pipelines Limited, owner of the Roma to Brisbane gas line, is owned equally by the Associated Group, producer of the Roma gas fields, and Southern Union Gas Company, an integrated natural gas utility based in Dallas, Texas. Moonie Pipeline Company Ltd., operator of the Moonie to Brisbane crude oil line, is an independent, non-profit making company.

A second alternative is for a group of producers

in a particular field or area to pool their resources in promoting a pipeline company. This was the method adopted in Canada in forming Trans-Mountain Pipeline Company and is the method behind the Trans Alaska Pipeline System and the proposed Mackenzie Valley gas pipeline in Canada. It is a method less likely to be adopted in Australia where the probability is that all the resources of one field will be held under lease to the one producer as a result of the large production tracts permitted by the Australian legislation.(5)

The third method relevant to the Australian scene is to establish a government-owned authority to construct and operate pipelines. Although part of the Trans Canada gas pipeline system was constructed by a crown corporation established for that purpose,(6) there is really no North American precedent of general application for this approach.(7) However, it is already well established in Australia. It appears that all interstate pipelines will be constructed and operated by the Federal Pipeline Authority.(8) The gas line supplying the Adelaide market is operated by the Natural Gas Pipelines Authority of South Australia(9) and the Victorian gas lines were constructed, and for a time operated, by the Victorian Pipelines Commission, although the Commission was subsequently abolished and its responsibilities were assumed by the government-owned Gas and Fuel

Corporation.[10] Not all jurisdictions have adopted this method, however. Both Western Australia and Queensland have refrained from direct participation in pipeline construction and operation and even South Australia and Victoria have restricted the operations of their respective authorities to gas pipelines. Only the federal Pipeline Authority has jurisdiction with respect to both oil and gas pipelines.

One further matter relevant to the initial planning of a pipeline should be mentioned briefly. Generally, the existence of a market induces the very search for oil and natural gas so that, once found, the problem will be simply to move these minerals to an existing market. For example, by 1964 the available reserves in the Roma gas field made the construction of a pipeline to Brisbane essential. Yet at the time, the existing Brisbane coal-gas sales were insufficient to justify the expense involved in constructing a pipeline to carry the equivalent amount of natural gas. It was only as a result of approaches by the Associated Group and the Queensland Government, that a major natural gas user, Austral-Pacific Fertilizers Ltd., was attracted to Brisbane, thus making the pipeline project feasible. To this extent it can be said that a market for Roma gas was created by the Associated Group.[11]

The other problem to be resolved at this early

stage of planning a pipeline is the securing of finance. However, as this will be involved with the question of who is to build a particular pipeline, and in many cases will itself determine that question, little can be added to the comments that have already been made except to note that several methods have been adopted in Australia. All the existing crude oil pipelines have been financed by private enterprise, generally by the producing company. With natural gas pipelines, however, three different methods of financing have been used to date. First, the Roma to Brisbane and Dongara to Perth lines were privately financed. Secondly, the Victorian Government wholly financed the trunk line supplying the Melbourne area and the Federal Government is financing the operations of the Pipeline Authority. The third arrangement is that adopted in South Australia where the Gidgealpa-Moomba to Adelaide line was financed by an arrangement between the Federal and State Governments and the Australian Loan Council.(12)

These comments on the questions of who is to finance and build a pipeline are, of course, far from exhaustive but they are sufficient to outline the complexity of the issues involved before any project reaches the drawing board. Once they are resolved the project is primarily one for the engineers and company economists.

The first question to be resolved at this next

stage is that of pipeline capacity, capacity being the rate of flow and not the volume required to fill the line,[13] usually expressed in barrels per day for oil lines and cubic feet per day for gas lines. For present purposes, it is sufficient to note that the capacity of a pipeline is determined as much by installed pumping capacity as it is by pipe diameter, so that capacity can be increased by the installation of further pump facilities. In the initial stages though, the question is determined by considering available reserves, present demand, any likely increase in demand, the prospect of new markets and the possibility of further reserves being discovered.[14]

Planning proceeds to a more detailed selection of the route, although some preliminary investigation may have been made in this direction with the earliest feasibility studies.[15] Generally speaking, the cheapest route will be the shortest and the proposed pipeline will normally proceed in a straight line from the field to its destination. The Gidgealpa-Moomba to Adelaide gas line, for example, proceeds in a virtually straight line from the processing plant near Innamincka.[16] However, the possibility of serving intermediate markets may result in significant deviations from the shortest route to major markets. Other factors, too, may result in deviations, such as the aim as far as possible to avoid

rivers, lakes and mountain ranges, cities and towns, unless they are being supplied by the line, and properties which would involve excessive costs for rights-of-way.[17]

The next step after the route has been selected, and any necessary licences have been secured,[18] is for rights-of-way to be acquired from the various property owners. This is an extremely complex procedure involving individual negotiations by the pipeline company's representatives with every owner. It was even more complex before statutory provisions gave pipeline companies the right of expropriation. For example, representatives of the Buckeye Pipeline Company in the U.S., to obtain easements for the original 368 miles of the Eastern Products System, had to negotiate with 2,517 people owning 1,742 parcels of land to be crossed, as well as obtain permits to cross 504 roads, 58 railroads, 11 rivers and nine canals.[19] Although the negotiations themselves are less complex now that the pipeline company or authority can enlist the support of statutory expropriation procedures,[20] nevertheless each owner must be approached. Acquisition of the right-of-way for the Dutson to Dandenong gas line constructed by the Victorian Pipelines Commission, for example, involved negotiations with 244 property owners.[21]

The width of right-of-way acquired will vary from project to project but will include sufficient area

for construction machinery to operate alongside the trench[22] and in some cases provision will be made for possible future duplication. At this stage, too, land must be acquired for pump stations and, in the case of crude oil lines, for terminal and emergency tank farms.

(ii) The Construction "Spread":

Once planning and the acquisition of rights-of-way have been completed, the first mechanical steps in the construction of a pipeline are taken. It is this aspect of pipelining that, in the earlier days of manual construction, bred a somewhat romantic air in which the pipeline gangs lived in tough and often drunken isolation.[23] Their work was rigorous and demanding with everything from trench-digging to pipe handling and back-filling being done by hand. Even the joints were manually threaded together by "tong gangs" before the widespread use of welding.[24]

Although many of the physical demands have been removed by the mechanisation of almost every aspect of the operation, pipelining is still "a Paul Bunyan operation - one of the toughest, fastest, riskiest, most spectacular types of construction jobs of the century. The pipeliners enact a drama that rivals last century's building of railroads . . . [with] a unit of men and machines as self-contained as an army division, capable

of propelling itself cross-country at astonishing speed . . ."[25] There may be, and on longer projects almost certainly will be, more than one of these units each of which is known as a "spread".

The first task is to clear the right-of-way by removing standing timber and all other obstacles.[26] All fences across the pipeline route have to be cut and temporary gates installed. Access roads for the pipe and other supplies to be brought in will also have to be constructed. Some grading may be involved but, unlike railways and to a lesser extent roads, it is not necessary to make the pipeline route as nearly level as possible.

Once the right-of-way is cleared, work commences on ditching. The pipe, usually in lengths of about 40 feet,[27] is then "strung" alongside the ditch. Any lateral or horizontal bends necessary in the pipe are made alongside the ditch with special pipe-bending machines.

Certain obstacles requiring special treatment are met on practically every right-of-way, the most common being road, railway and river crossings.[28] With roads and railways, a tunnel is usually bored under the embankments, a casing of slightly larger diameter than the pipe inserted, and the pipe fed through this casing so that no interference to the road surface or rails is involved. The manner in which river crossings are made varies according to the particular circumstances.

Sometimes overhead crossings are made, but these are the exception rather than the rule. More usually, the pipe is laid under river beds and covered. Such sections of the pipeline may be encased in concrete, or weighted in some other manner, to prevent them from floating to the surface. Specialized contractors may be called in for larger river crossings. If the pipe across a river is lost, the whole line may be shut down for a considerable length of time and extensive pollution will result.

On the ordinary sections of the right-of-way, the next step is for the pipe to be aligned and welded.(29) The lengths of pipe are aligned with clamps and then welded alongside the trench. The quality of the welding is inspected visually and usually by X-ray or gamma-ray photographic records as well.(30) All welds which prove defective must be cut out and redone but usually this is required with only a few joints.

Following welding, the now almost continuous length of pipe is cleaned and covered with a protective coating by a machine which travels along the pipe.(31) The usual method is for the pipe to be "cradled" into the ditch by side-boom tractors as it emerges from the coating machine. The pipe is, of course, flexible when joined in continuous lengths and thus can be laid into the trench in more or less one unit, limiting the only welding done in the trench itself to certain tie-ins.

Once laid in the trench, the excavated material is back-filled, fences and gates replaced and the right-of-way cleaned up.(32)

However, before the line is filled with oil or gas it must be tested. This is now done almost invariably by subjecting it to hydrostatic pressure.(33) The Dutson to Dandenong gas line in Victoria, for example, was subjected to pressure testing with water up to 1620 pounds per square inch,(34) although the maximum operating pressure is only 1000 pounds per square inch.(35) Only three failures occurred. Once operational, pipelines are patrolled regularly for signs of failures - although most of these can be detected from monitoring of pressure guages - and as a check on construction activities adjacent to the line.

SECTION II

OPERATION OF PIPELINES

(i) Oil Pipelines:

In any particular oil field, there will usually be several and perhaps even hundreds of producing wells.(36) From these wells, the oil is first collected at a separator station or at tank farms before entering the main pipeline system.(37) The pipes used for this function

form the "gathering system" and are to be distinguished from trunk lines[38] as they are not generally covered by pipeline legislation.[39]

Where one producer alone is using the trunkline, the process of feeding production to the pipeline is a relatively simple matter. However, where a pipeline is receiving production from several producers and delivering it to more than one refinery or, in the case of a products line, to more than one outlet, the transactions involved are quite complex and require some explanation. Although the former situation prevails in Australia at present, even in relation to products pipelines,[40] some of the legislative provisions anticipate the latter situation. It is proposed, therefore, to outline the transactions involved in pipeline operation in these circumstances as a background to the discussion of these particular provisions.[41] In doing so, it is anticipated that procedures substantially similar to those employed in the U.S. will be adopted in Australia when the occasion arises.

In simple outline, the procedure is as follows. Usually, the pipeline acts as a carrier only and does not purchase outside oil.[42] As the oil is run into the pipeline company's gathering system from the producer's field tanks, it is measured or gauged.[43] A sample of oil may also be taken by means of a "thief". A "run

ticket", noting the volume and quality of oil, is then issued to the producer. It is on the basis of this ticket that the producer is paid although it should be noted that it is not his purchaser, usually a refinery, who issues the ticket but the pipeline company. The run ticket also determines the amount to be delivered to a particular purchaser.(44) However, the pipeline company is not required to deliver the identical batch of oil to that received from a particular producer but only the same amount of similar quality oil.(45)

(ii) Commingling and Contamination:

The problems involved in these transactions are much more complicated in fact than this brief outline suggests. Where a pipeline is carrying oil for outside shippers on any but the smallest scale, inevitably the quality of the various shipments will vary considerably. Oils of varying gravities can be transported successfully in the same pipeline subject only to a comparatively small amount of "commingling". However, the factors affecting the amount of commingling impose several restrictions on, first, the amount of oil which can be accepted for shipment in one tender and, secondly, the order in which a particular tender may be accepted, relative to other shipments of different grades.(46)

Oil pipelines operate on the basis of successive

volume displacement of the oil in the line by oil entering the line.[47] In other words, the pipeline contains a constant stream of oil, so that there will be an interface between batches of various qualities.[48] At the point of contact between two batches there will be some intermixing or commingling,[49] due in part to the fact that velocities across a pipeline section are not constant so that the following fluid will intrude into, or commingle with the first.[50] The extent of this commingling will vary considerably depending on factors such as pumping rates, the number of pumping stations through which the oil passes, pipe friction, the density differential between the two batches and viscosity.[51]

However, for given oils travelling over a given distance, the amount of commingling is relatively constant.[52] The volume of commingling increases with distance travelled but not in direct proportion. It does not vary with the volumes of the two batches although obviously the larger the volume of oil in any particular batch the smaller the commingling in proportion to, or as a percentage of, that batch.[53]

This explains why it is necessary for pipelines carrying varying grades of oil to impose minimum tenders, a requirement that, it will be seen, has been cited as evidence in support of allegations of denial of access to common carrier pipelines by independent producers and

refiners.[54] Obviously some minimum tender requirement is imposed as a matter of practical necessity. A shipper presumably would not tender a batch of oil in such a small quantity that the commingling would amount to, say, 50 per cent of the batch unless the difference between the grades of oil concerned was such that this would not impair the quality of his shipment. However, with certain shipments there is a maximum tolerance of commingling beyond which the batch of oil or the product contaminated will not meet the necessary specifications. Wolbert gives the following illustration:[55]

> For example, the spread of contamination between kerosene and diesel fuel through Plantation's main line is said to be approximately 800 barrels on either end. One half of the total contamination, roughly 800 barrels, is kerosene to be disposed into the diesel fuel. But 3 per cent kerosene is the limit that specifications will permit to be introduced into the diesel. Therefore, to absorb the 800 barrels of kerosene into the diesel fuel and still remain within specifications, there must be 800 x 100/3 or 26,667 barrels of diesel in the batch. Hence the requirement of a 25,000 barrel minimum.[56]

But, as he emphasises, this minimum tender requirement is correct for this particular operation only. The "correct" minimum will vary with the particular line and quality of the product to be shipped. The important point to observe for present purposes is that there are sound technical reasons for requiring minimum tenders.

This fact, that certain qualities of oil or

products have a maximum tolerance of contamination by other oil or products, produces problems in scheduling and dispatching shipments. Commingling can be reduced to acceptable limits if certain types of oil or products follow each other in a particular order, quite apart from the loss in efficiency of pumping horsepower which follows where there are great differences in viscosity of adjacent products.(57) Arranging shipments to minimise these problems is the function of the scheduling and dispatching departments of the pipeline company. Crude oil shipments are scheduled following periodic meetings between shippers and representatives of the pipeline.(58) Apart from co-ordinating demand with the pipeline capacity, the scheduling department is responsible for arranging connections with other pipelines. The dispatching department then takes over and, as well as supervising the actual flow of oil into the line, is responsible for estimating arrival times of particular shipments and varying the rate at which the oil is pumped to meet requirements.(59) From the records of receipts and total hourly pumping, the dispatcher is able to predict the arrival time of any particular batch so that "cuts"(60) between the various grades can be made at the appropriate delivery points.

A basically similar procedure is adopted for products' scheduling and dispatching although there are differences between the two which have been described as

follows:[61]

> Crude oil lines are used most frequently to gather oil from many fields and transport it to refineries or tanker-loading terminals. The oil is received from many sources and delivered to a few. The different oils may be either mixed or kept separate. Products lines most frequently are used to distribute the products of one or a few refineries to many users. Only a small per cent of one product can be blended with another without affecting its specifications. With crude oil, a larger percentage of blend usually is allowed. Different products must be kept separate and shippers usually demand exactly the same product which they delivered to the pipeline. Crude oil pipeline operators make deliveries of common stock oil which is the same grade as that received, but it is not necessarily the identical oil.

To ease scheduling and dispatching problems to some extent, pipelines frequently establish cycles, especially for products, in which the various products are dispatched in a particular sequence.[62]

(iii) Gas Pipelines:

There are certain basic differences between the operation of oil and natural gas pipelines. Although gas can be transported to a limited degree in liquefied form under pressure by rail, truck or ship, pipelines are the means by which the vast bulk of natural gas deliveries are made. The gas pipeline, unlike the oil pipeline, provides a necessary direct connection between producing fields and ultimate *consumers*, rather than refiners or

marketers.

This fundamental distinction has been explained in the following terms:[63]

> Gas is essentially sold on a long-term basis by the producer and is delivered to the ultimate user entirely by pipeline. The gas pipeline transporter and its distributors must have the capacity to deliver the gas exactly when it is needed on any day... . [Gas pipeline] design is very closely geared to the maximum daily requirements of all its customers, and the location of many of its facilities is determined by almost mathematical consideration to ensure delivery to customers as economically as possible. *The gas transporter provides,* in addition to transporting the commodity itself, *the service of delivering the right quantity exactly when it is needed.* He therefore usually owns the gas in the pipeline so as to be free at all times to deliver gas to whichever customer may need it at any particular instant. Gas transmission cannot ordinarily be allowed to suffer interruption of any significant duration.

Not all gas transmission pipelines, however, purchase the gas which they carry. In Canada, the most notable exception is the Alberta Gas Trunk Line Company Limited which has built and operates the gas grid system in Alberta almost exclusively.[64] This company, constituted by special Act of the Provincial Legislature,[65] delivers gas at various points just within the boundaries of Alberta to "Special Act companies" which are the purchasers of the gas. The arrangement is exceptional and it should be noted that the pipeline companies to which

Alberta Gas Trunk delivers own the gas.[66]

In Australia, no consistent pattern has emerged among the gas pipeline operators. Associated Pipelines Limited, owner of the Roma to Brisbane pipeline, does purchase gas at wellhead meters and resells the gas at sales meters in Brisbane, at Ipswich, Toowoomba and Roma. The former Victorian Pipelines Commission was empowered to purchase natural gas for transmission[67] and in fact did purchase at the Gippsland Gas Processing Plant, delivering to the Gas and Fuel Corporation, owner of the reticulation system, at the city gate at Dandenong. The Gas and Fuel Corporation, as successor to the Commission since the latter's abolition,[68] now purchases at the Gippsland Plant. In South Australia, the Natural Gas Pipelines Authority is not empowered to buy natural gas except for its own use and consumption.[69] The property in the gas which it carries passes to the purchaser direct from the producer at the valve on the downstream side of the meter station installed for the purpose of supplying the purchaser.[70] The Federal Pipeline Authority will likely act as a purchaser of gas at the wellhead or processing plant.[71]

The actual mechanics of moving natural gas through a pipeline differ, for present purposes, from the procedure in oil pipelines in the following respects. First, there is no "batching" of different grades of natural gas. All processing necessary to prepare natural gas

for the market is done "in the field" before the gas enters the pipeline.[72] Secondly, once the gas enters the main pipeline, it moves in a continuous stream to the point of consumption. There are no intermediate stages such as refineries, bulk storage[73] or shipping by rail or sea as there are with crude oil before it is marketed. As the whole procedure of natural gas transmission is completely automated, any increased demand automatically, without any direct human intervention, opens the valves on the various wellheads by the amount necessary to supply that demand.[74]

It remains to make some brief observations on the form of gas purchase contracts.[75] Generally in the past in North America, natural gas pipelines have been built by companies established for that purpose. Crude oil and products pipelines, on the other hand, usually originated from the refiners as part of the process of integration.[76] Finance for these lines could be provided from the revenues derived from existing refining operations, whereas a natural gas transmission company established for that purpose had no similar source of revenue.[77] The only security that could be offered for borrowing the initial capital cost of a natural gas pipeline was the purchase and sales contracts. This resulted in virtually the whole supply of a particular field being committed to a particular market and it was not until this commitment had been made by the purchase and sales

contracts that a pipeline was built.(78) Thus, a long term relationship between the transmission company and the producer was established. In North America, this term is usually 20 to 25 years.(79)

Obviously circumstances will change during a term such as this. Gas purchase contracts, therefore, invariably provide for variation of certain of their terms, the most common provision being an escalation clause relating to price.(80) Another provision frequently contemplates a review of the contract if, for example, forecast volumes are not being achieved.

FOOTNOTES - CHAPTER II

(1) Many grammatically inaccurate terms are peculiar to the petroleum industry. Several examples from the pipeline industry could be added to those cited in Ball, *et al.*, *This Fascinating Oil Business*, revised edition, at pp. *xiii et seq.* (1965).

(2) "[T]he following fundamental differences between the two methods of transportation preclude the analogy: (1) pipe lines were built by the shippers who use them - the oil companies themselves; (2) pipe lines were built to serve one industry whereas railroads were built to serve all industries, as well as passengers; (3) the typical crude line was laid from a particular refinery or terminal to a producing field for the purpose of obtaining a supply of crude oil for that refinery ... Railroads, on the other hand, were built for the purpose of engaging in the business of transportation for a transportation profit. . . .; (4) pipe lines carry only petroleum products in one direction. Railroads haul all kinds of commodities in as many directions as their lines run; (5) a pipe line either transports crude oil from the field to the refinery, or refined products from the refinery to the marketing area. It cannot carry crude to the refinery and then transport the refined product back to the producing territory. By contrast, a railroad, hauling some products predominently in one direction, has the advantage of return hauls of other products; (6) crude pipe lines have a limited expectancy . . . But the typical railroad can expect increasing traffic as the community being served continues to expand with the passage of time; (7) pipe line capacity is limited. Unlike a railroad, it cannot run additional trains or add cars. . . ." Wolbert, *American Pipe Lines*, at pp. 55-6 (1951). The analogy, however, does have limited illustrative value. Apart from the similarities in construction procedure, such as acquisition of rights-of-way and the connection between the points being served by a continuous line, the field and gathering lines of a pipeline system can be compared to the spur lines of a railway, the storage tanks to freight yards and the trunk lines to major railway arteries.

(3) The line is being constructed for the Federal Pipeline Authority and is due to be completed in 1975.

(4) This is the pattern which is developing in Australia for oil pipelines. However, historically in the United States of America crude oil pipelines have been built mostly by the refiners. *See* further, Chapter III, Part I, Sections I and II, *infra*, at pp. 41 *et seq*.

(5) *See* further, Chapter IV, Section II(v), *infra*, at pp. 111 *et seq*.

(6) *See* the *Northern Ontario Pipe Line Crown Corporation Act*, S.C. 1956, c. 10; repealed S.C. 1967-68, c. 31. However, it was always the intention that the Corporation's responsibilities would ultimately be assumed by the Trans Canada Pipeline Company. *See* further, Chapter III, Part II, *infra*, at pp. 72-3.

(7) The Alberta Gas Trunk Line Company in some respects approximates a government-owned transmission utility. *See* further, *infra*, at pp. 26-7.

(8) *See* further, Chapter VI, Section III, *infra*, at pp. 209 *et seq*.

(9) *See* further, Chapter VI, Section I, *infra*, at pp. 190 *et seq*.

(10) *See* further, Chapter VI, Section II, *infra*, at pp. 203 *et seq*.

(11) Associated Pipelines Limited, *Natural Gas comes to Brisbane*, (1969). For an interesting example of legal problems that may arise from such pursuits, *see* the judgments of the Supreme Court of Canada in *Midcon Oil and Gas Co. v. New British Dominion Oil Co.*, [1958] S.C.R. 314.

(12) For particulars of this arrangement, *see* Parliamentary Paper No. 102 (South Australia), *Finance for a Natural Gas Pipeline in South Australia* (1966). *See* further, Chapter IV, Section IV, *infra*, at pp. 135-6.

(13) American Petroleum Institute, *Oil Pipe Line Transportation Practices*, Volume II, at p. 1.

(14) *See* generally, Parliamentary Paper No. 102, *supra* n. 12, at pp. 2-5. For a consideration of some of the other factors involved, *see Oil Pipe Line Transportation Practices*, *supra* n. 13, at p. 23.

(15) For a discussion of the statutory provisions relating to preliminary investigations, *see* Chapter V, Section II, *infra*, at pp. 153 *et seq*.

(16) *The Journal of Industry*, Natural Gas Issue, November, 1969, at p. 54.

(17) *Oil Pipe Line Transportation Practices*, *supra* n. 13, at p. 30; Victorian Pipelines Commission, *First Annual Report*, June 30, 1967, at p. 10.

(18) For a discussion of the licensing procedures, *see* generally, Chapter V, Sections II and III, *infra*, at pp. 153 *et seq*.

(19) The Buckeye Pipe Line Company, *The Flow of Oil*, at pp. 19-22 (1961).

(20) *See* further, Chapter V, Section IV, *infra*, at pp. 168 *et seq*.

(21) Victorian Pipelines Commission, *Third Annual Report*, June 30, 1969, at p. 7.

(22) The Dutson to Dandenong natural gas pipeline in Victoria, for example, was laid on an 80-foot easement. Victorian Pipelines Commission, *Second Annual Report*, June 30, 1968, at p. 8. Usually, the right-of-way is 50 to 80 feet wide. *Oil Pipe Line Transportation Practices*, *supra* n. 13, at p. 37.

(23) For an entertaining account of conditions in early pipelining camps, *see* Loos, *Oil on Stream: A History of Interstate Oil Pipe Line Company, 1909-1959* at pp. 19 *et seq*. (1959). *See* also, Larson and Porter, *History of Humble Oil & Refining Company*, at p. 146 (1959).

(24) Screw couplings are still used for some smaller field and gathering lines.

(25) *Oil Pipe Line Transportation Practices*, *supra* n. 13, at p. 41.

(26) For a discussion of the procedures involved in preparing the right-of-way and stringing pipe, *see* generally, *Oil Pipe Line Transportation Practices*, *supra* n. 13, Chapter III.

(27) *Id.*, at p. 57. The pipe for the Gidgealpa-Moomba to Adelaide line was transported part of the way in 40-feet lengths, welded into 80-feet sections and then

moved to the right-of-way. *The Journal of Industry*, Natural Gas Issue, November, 1969, at p. 70.

(28) *See* generally, *Oil Pipe Line Transportation Practices*, *supra* n. 13, at pp. 45 *et seq.*

(29) *Id.*, at pp. 56 *et seq.*

(30) The Dutson to Dandenong line was X-ray tested at every field weld. Victorian Pipelines Commission, *Second Annual Report*, June 30, 1968, at p. 9.

(31) *See* generally, *Oil Pipe Line Transportation Practices*, *supra* n. 13, at pp. 59 *et seq.*

(32) *Id.*, at p. 71.

(33) *Id.*, at pp. 71 *et seq.*

(34) Victorian Pipelines Commission, *Third Annual Report*, June 30, 1969, at p. 7.

(35) Victorian Pipelines Commission, *Second Annual Report*, June 30, 1968, at p. 9.

(36) For example, in March, 1970, there were 348 producing wells on the Barrow Island field in Western Australia. The Petroleum Information Bureau (Australia), *Petroleum Search in Australia*, March, 1970.

(37) For a general description of the procedure, *see* Ball, *et al.*, *op. cit.*, *supra* n. 1, Chapter 10.

(38) "Gathering systems are used to move the oil from the producers' lease tanks into the first pumping station or tank farm on the company's trunk-line system.... Trunk lines move crude oil from the initial trunk station to refineries, marine loading terminals, interconnection with other carriers and also transport refined products from storage tanks at refineries, terminals and other points of origin to terminals located in areas where refined products are used." *Oil Pipe Line Transportation Practices*, *supra* n. 13, at p. 1.

(39) For example, section 4 of the *Petroleum Pipelines Act 1969*, Act No. 42 of 1970 of Western Australia, excludes from the definition of "pipeline" a pipeline that is used "for the conveyance of petroleum from the well head to a tank or separator or for the collection of petroleum within the area in which it is produced or recovered." *See* further, Chapter V,

Section I(ii), *infra*, at pp. 151 *et seq*. Gathering lines may, nevertheless, traverse considerable distances. In the Barrow Island Field, for example, there are approximately 240 miles of gathering lines from wells to separator stations with an additional nine and a half miles of pipeline to storage tanks. Stratton, *Barrow Island Oilfield Western Australia*, Ministry of Fuel and Power, Victoria, June, 1969, at p. 8.

(40) Most products lines in Australia to date have been constructed by particular refineries and traverse short distances for the transportation of that refinery's products to depots and wharves. *See, Summary of Natural Gas and Oil Developments in Victoria*, Edition No. 6, Schedule of Pipelines, Ministry of Fuel and Power, Victoria, June, 1969. So far as the writer has been able to ascertain, the only pipeline in Australia transporting oil for more than one producer is that operated in Queensland by Moonie Pipeline Company Pty. Ltd. "Essentially Union-Tenneco owns all of the wells supplying the pipeline. A small amount of condensate is transported for the Associated Group at Roma." Letter to the candidate from Moonie Pipeline Company Pty. Ltd., November 17, 1969.

(41) The provisions referred to are the "common carrier" provisions discussed in Chapter VII, *infra*, at pp. 234 *et seq*.

(42) *I.e.*, oil carried for parties other than the owners of the pipeline. However, oil carried by the Moonie Pipeline Company Pty. Ltd. in Queensland does become the property of the company as it enters the storage tank at Moonie. Letter to the candidate from Moonie Pipeline Company Pty. Ltd., November 17, 1969.

(43) Inevitably, automation has not neglected the oil field. This process is included in a system known as LACT which stands for "Lease Automatic Custody Transfer". The system extends beyond the measuring of oil in the field to the running of gas-oil separators, removal of certain impurities and sampling for gravity determination. *See* further Ball, *et al.*, *op. cit.*, *supra* n. 1, at pp. 182-3. LACT is employed in the Moonie oil field. Letter to the candidate from Moonie Pipeline Company Pty. Ltd., November 17, 1969.

(44) *See* generally, Ball, *et al.*, *op. cit.*, *supra* n. 1, at pp. 180-3; Wolbert, *op. cit.*, *supra* n. 2, at pp. 25-29.

(45) Wolbert, *op. cit.*, *supra* n. 2, at p. 37.

(46) *See* generally, *id.*, at pp. 29-35.

(47) *Id.*, at p. 41.

(48) Occasionally mechanical separation is used but this has proved to be unsatisfactory. *See* Bell, *Petroleum Transportation Handbook*, at pp. 19-20 (1963). Another method occasionally used for segregating products is to insert a "flag" or "buffer batch", usually kerosene, naphtha or unleaded gasoline to prevent contamination of an unleaded product with a leaded product or a low flash with a high flash point product. *See*, *Oil Pipe Line Transportation Practices*, *supra* n. 13, Volume IV, at p. 122.

(49) This "commingling" is sometimes referred to as "contamination" but, as Wolbert points out, *op. cit*, *supra* n. 2, at p. 29, the use of this word may be governed by the basis of any particular interest. "[I]f we were concerned with the lower grade product, would we say that it had been 'contaminated' by the infiltration of the higher grade product?"

(50) Bell, *op. cit.*, *supra* n. 48, at p. 19.

(51) *See* generally, Wolbert, *op. cit.*, *supra* n. 2, at p. 32; *Oil Pipe Line Transportation Practices*, *supra* n. 13, Volume IV, at p. 119.

(52) Bell, *op. cit.*, *supra* n. 48, at p. 19.

(53) "In well designed and operated systems the amount of mixed oil is a small fraction of one per cent of the average batch of oil." *Oil Pipe Line Transportation Practices*, *supra* n. 13, Volume IV, at p. 119.

(54) *See* Chapter III, Part I, Section II(i), *infra*, at pp. 47 *et seq*.

(55) *Op. cit.*, *supra* n. 2, at p. 35.

(56) "Sometimes the inter-batch mixture is withdrawn into a small tank and then added at a low rate to an appropriate product in the line, to assure better mixing." *Oil Pipe Line Transportation Practices*, *supra* n. 13, Volume IV, at p. 122.

(57) Wolbert, *op. cit.*, *supra* n. 2, at p. 35.

(58) *See* generally, *Oil Pipe Line Transportation Practices*, Volume IV, *supra* n. 13, at pp. 117-118.

(59) *Id.*, at p. 119.

(60) "Making a '. . . cut' means, in pipeline language, diverting an incoming stream from one tank into another." *Id.*, at p. 122.

(61) *Id.*, at p. 124.

(62) *Id.*, at p. 122.

(63) Lewis, *Constitutional Law Problems in Canadian Oil and Gas Legislation, Provincial-Federal Co-operation*, 3 Alta. L. Rev. 412, at p. 413 (First Petroleum Law Supplement, 1964), emphasis added. *See* also, Olisa, *Government Control of Oil and Gas Pipe Lines in Alberta*, 5 Alta. L. Rev. 226, at pp. 227-8 (1967).

(64) *See* Acorn, *Constitutional Law Problems in Canadian Oil and Gas Legislation, The Background*, 3 Alta. L. Rev. 367, at p. 370 (First Petroleum Law Supplement, 1964).

(65) *Alberta Gas Trunk Line Company Act*, S.A. 1954, c. 37, as amended.

(66) There are some indications, however, that the pattern of gas pipeline companies acting as purchasers of the gas which they transport may be changing. *See* the comments in Chapter III, Part II, *infra*, at p. 76.

(67) *Victorian Pipelines Commission Act 1966*, Act No. 7477 of 1966 of Victoria, section 11(2)(b). *See* further Chapter VI, Section II, *infra*, at pp. 204-8.

(68) By the *Gas and Fuel Corporation (Pipelines) Act 1971*, Act No. 8122 of 1971 of Victoria. *See* further, Chapter VI, Section II, *infra*, at pp. 208-9.

(69) *See* further, Chapter VI, Section I, *infra*, at pp. 191-5, 199-201.

(70) Letter to the candidate from Santos Ltd., November 12, 1969.

(71) *See* further, Chapter VI, Section III, *infra*, at pp. 221-2.

(72) *See* American Petroleum Institute, *Field Handling of Natural Gas*, at p. 25 (1956).

(73) Gas can be stored to a limited extent in underground reservoirs linked to the main pipeline system.

(74) Despite the dangers inherent in drawing analogies between pipelines and other forms of transportation, there is a close resemblance between this procedure and the operation of hydro-electric power distribution systems. When a consumer's light switch is turned on, the increased demand triggers a switch at the generating station which in turn opens the valves to allow more water through to increase turbine output the necessary amount. In fact the drain on the system of one electric light is probably insufficient to operate the valve but the cumulative effect of several switches in periods of peak demand will result directly in the opening of a valve. Similarly, with gas transmission, one stove burner is probably not sufficient to increase output, but the cumulative effect of several would be. The important point for present purposes is that events at one end of the line are linked directly to events at the origin of the line.

(75) Oil purchase contracts are not of concern to the present study, first, because these do not usually take the form of long-term contracts as natural gas contracts do and, secondly, the pipeline company usually does not purchase the oil which it carries. Even where the purchaser of the oil also owns the pipeline, as in an integrated company, it will not be the pipeline department which does the purchasing, but a separate purchasing department. On gas purchase contracts generally, *see* Holland, *Comparative Analysis of Gas Purchase Contracts*, 9 Alta. L. Rev. 479 (Sixth Petroleum Law Supplement, 1971).

(76) *See* further, Chapter III, Part I, *infra*, particularly at pp. 45-7.

(77) *See* McLean and Haigh, *The Growth of Integrated Oil Companies*, at pp. 226-7 (1954).

(78) Similar problems can arise in relation to the financing and construction of crude oil pipelines although it is not usual for a company to be established purely for the purpose of oil transportation except perhaps as a subsidiary of a refiner or producer in which case finance presumably would be arranged through the parent company. The problem, however,

did arise in planning the Trans Mountain Pipeline in Canada. This line was built by a company formed for that purpose and owned largely by a group of producing companies. Before the decision to proceed with the line was taken, it was necessary to negotiate through-put agreements to guarantee adequate supplies to justify construction of the line. *See* Wilson and Taylor, *The Building of Trans Mountain*, at p. 15 (1954).

(79) Hetherington, *The Orderly Development of Petroleum in Victoria*, a Report to the Premier of Victoria, March, 1966, at para. 4-5, 7-7.

(80) *See* Taylor, *Escalation Clauses in Gas Purchase Contracts*, 3 Alta. L. Rev. 255 (1964).

CHAPTER III

THE AMERICAN AND CANADIAN EXPERIENCES

The pipeline industry really emerged in Australia over a period of only three or so years from 1968. Three major natural gas pipelines were completed in 1969 and a fourth in 1971.[1] Although the first crude oil pipeline was completed in 1964,[2] the major activity associated with the Bass Strait oil fields was concentrated in the period from 1968 to 1970.

Australian legislators and administrators were thus faced with the task of providing a legislative framework for these activities suddenly and in the complete absence of any domestic precedent. It is not surprising, then, that they turned to North America, where there is a vast and mature pipeline industry, for guidance as to the problems to be confronted in regulating the pipeline industry. At the administrative level, the Governments of three States obtained reports from North American experts in the petroleum industry. Dr. Charles R. Hetherington, then president of a Calgary, Alberta, firm of consulting engineers, prepared reports for the Victorian[3] and Queensland[4] Governments while the South Australian Government was advised by the Bechtel Pacific Corporation Ltd. and the Oil and Gas Conservation Board of Alberta.[5] In

debate on the various pipelines acts in the State Parliaments, the legislators themselves appreciated that they were dealing with the subject without Australian precedent[6] and made frequent references to the American and Canadian experiences.[7]

In view of this reliance on North American experiences, it is proposed in this Chapter to trace the development of pipelines in the United States of America and Canada and to discuss the methods employed there to deal with particular problems. Although there are basic differences between the Australian setting and the background in the United States and Canada,[8] there will probably continue to be reliance on those experiences as a guide, even if the solutions adopted there to particular problems are thought to be unsuitable for Australian conditions.

The purpose of the Chapter, then, is to consider the problems of oil and gas pipelines in the United States and Canada and the methods adopted to solve them with a view to isolating those problems which might arise in Australia and analysing whether American and Canadian solutions to them may have some relevance in Australia. The survey will commence with the American experience where pipelines have been the subject of major controversy. The industry has not provoked the same degree of controversy in Canada, at least not until recently, but certain aspects of the Canadian experience may provide useful precedents

in Australia.

PART I

THE AMERICAN EXPERIENCE

SECTION I

HISTORICAL INTRODUCTION[9]

The petroleum industry began with completion of the first successful oil well by Colonel Edwin L. Drake in Titusville, Pennsylvania, on August 27, 1859. The well was typical of most that followed:[10]

> It was located in a relatively undeveloped area, poorly served by transportation, and remote from the markets for oil. Pittsburgh, one hundred miles away, was the nearest large town, and other population centers were even more distant. Thus, within a few months of Drake's success the infant petroleum industry was facing its most formidable problem: transportation. Transportation requirements have gone hand in hand with the discovery and development of the petroleum industry ever since.

The immediate solution to this problem was to use nearby Oil Creek and the Allegheny River. When the main production area shifted from the river banks to the hills, the oil was hauled to the rivers by teamsters and then carried by barge to Pittsburgh. The system, however, was

unsatisfactory. First, it was necessary to resort to damming the rivers to provide enough water depth for the barges to move downstream on the rush of released water. But secondly, and more importantly, it was fantastically expensive. In 1862, it was estimated that carrying and handling charges were accounting for about two-thirds of the $12 per barrel cost of oil at the refinery and by 1865 teamsters were charging $3 per barrel to carry oil the five miles from the Pithole field to the railhead at Oil Creek.(11)

Obviously, the setting was ripe for the introduction of some cheaper and more efficient means of transportation. It came in October, 1865, with the completion of the first successful oil pipeline by a six-man partnership called the Oil Transportation Association.(12) The line, of two-inch diameter, ran for six miles from the Miller Farm, near Pithole, to the railhead on Oil Creek and could handle 2,000 barrels per day for $1 per barrel, equivalent to the work of 300 teams working 10 hours a day, seven days a week. However, the teamsters were not about to sit by while this threat to their security became established. They tore up the line, smashed the pumps and "promised bodily mayhem to all the builders."(13) The teamsters maintained their profitable supremacy but the pipelines continued to assert themselves, particularly as the shorter lines, laid hastily on the surface, could

be reassembled almost as quickly as the teamsters could tear them up. But at this early stage, such lines were used largely for short hauls to refineries or, more commonly, to connect the fields to the railheads as the railways held a complete monopoly on long distance transportation of oil.

In 1874, Dr. Peter Hostetter completed construction of a three-inch cast-iron pipeline from Butler County to Clairview near Pittsburgh, known as the Columbia Conduit Line. This pipeline ushered in the development of long distance, or trunk, pipelines(14) and its potential as the key to petroleum marketing was quickly appreciated. By 1877, the line had been purchased by the National Transit Company, a subsidiary of the Standard Oil Company.

Despite early set-backs from "natural" obstacles, largely due to engineering ignorance,(15) the trunk lines continued to grow but inevitably ran afoul of the railroads, just as the earlier short-haul pipelines had had to face the disruptive tactics of the teamsters. The railroads at first teamed together to refuse rights-of-way for pipelines across their tracks but this tactic was not altogether successful. It is reported that in at least one instance, a pipeline was built up to either side of the railroad right-of-way, the oil was pumped to storage tanks on one side, carted across a nearby public roadway to other tanks, and then pumped on its journey by pipeline while the rail-

roaders stood by helplessly.[16] The railroaders then resorted to the more direct tactics earlier employed by the teamsters but the pipelines continued to grow.

In 1878, the Tidewater Pipe Company completed the first line of more than 30 miles in length, a 109 mile, six-inch line running over a mountain nearly 2,600 feet high. Completion of the line had an important impact on the petroleum industry quite apart from the remarkable technical achievement which it represented. The Standard Oil Company had attempted to block completion of the line by trying, but failing, to acquire an exclusive right from the northern to the southern boundary of Pennsylvania which would have presented an effectual barrier to the Tidewater line. The experiment established once and for all the superior economics of pipelines over the railroads for long distance haulage and that pipelines were bound to replace them.[17]

From that point on, crude oil pipelines[18] have continued to grow. By 1968, trunk lines in the United States spanned 121,796 miles and gathering lines 47,511 miles. Together they delivered approximately 7.3 billion barrels of crude oil and products during the year.[19]

However, this growth and development have been accompanied by a bitter controversy over the operation and ownership of these underground arteries. The next Section of this Chapter analyses that controversy before a

discussion in the following Section of some of the regulatory controls that have been utilised in the United States.

SECTION II

THE PIPELINE CONTROVERSY

"Oil in the field tanks is like a fat steer on the range; it needs to be taken thence and made into something useful."[20] In view of this fact and also the fact that pipelines are the usual means by which this is done, it follows that the control of pipelines may be used as a means to control the petroleum industry. The controversy with which this Section is concerned has raged around the experience in the United States that this form of control historically has been exercised in fact by a few major companies, resulting in denial of access to supplies and outlets for independent refineries and producers respectively, inequality of competition and creation of monopolies.

The earliest pipelines, although constructed by independent enterprises and operated as common carriers,[21] were soon absorbed by major companies as part of the process of vertical integration.[22] Some were purchased outright while others joined forces with producing and refining groups to form major companies.[23] However, as McLean

and Haigh point out in their study of integration in the oil industry:[24]

> With very few exceptions, all the great crude oil trunk and products pipe line systems which were constructed thereafter were initiated by companies already engaged in either the producing or the refining business.
>
> As of 1950 companies engaged in refining activities or some combination of refining, producing, and marketing activities owned about 86% of the crude oil gathering line mileage in the United States, 82% of the crude oil trunk line mileage, and 92% of the products pipeline mileage.

Wolbert cites testimony to the hearings of the Temporary National Economic Committee in 1939-41 that twenty integrated major companies owned or controlled 57.4 per cent of the crude oil gathering pipe line mileage, 89 per cent of the crude oil trunk mileage and 96.1 per cent of the gasoline line mileage.[25]

The reasons for this intense concentration of ownership are fairly obvious. The first is that few small producers or independent refiners are able to provide the huge capital cost involved in pipeline construction. Secondly, the capital required is 'high risk' capital as production from the particular field which a pipeline is constructed to serve might decline more rapidly than expected or a new and closer field to refineries might be discovered. Large corporations are better able to survive these risks.

Thirdly, refineries are dependent on pipelines for supplies of their raw material and, as pipelines depend for success upon maintenance of throughput volumes as close to capacity as is possible, they are dependent on the refineries for an assured outlet. Refinery ownership of pipelines provides the solution to this economic interdependence. Fourthly, the competitive necessity of vertical integration as a result of the early cut-throat competition in the oil industry has also played its part.(26) However, "no matter how satisfactory may be the explanation of concentration and integration, explanation is not synonymous with justification."(27) It is proposed, then, in this Section to analyse the results of this concentrated ownership by examining specific complaints against major company ownership of pipelines.

(i) Denial of Independent Access:

Notwithstanding that common carrier provisions were included in the earliest statutes dealing with crude oil pipelines,(28) a major complaint by independent producers and refiners has been that they have been denied access to the facilities of pipelines owned by the major companies and thus, effectively, to markets.(29) Wolbert categorizes four aspects of the complaint: rates, service requirements, ratable taking and shippers' use of pipelines.(30) It is proposed to consider each in turn.

Studies of the development of petroleum pipelines abound with examples of excessive dividend declarations by pipeline companies which, it is argued, are themselves indicative of excessive rates.(31) For example, in 1933 the Ajax Pipeline Company paid a dividend of 21,500 per cent(32) and in 1937 Phillips Pipe Line Company paid regular dividends of 11,100 per cent, the Wabash Pipe Line Company paid 4,200 per cent and two other companies paid regular dividends of more than 200 per cent.(33)

Initially rates were deliberately set high enough to enable a line to get back its heavy investment within a few years as the period of profits might be brief.(34) However, in the earliest period of the industry's development, even this justification was suspect as the rates tended to equal rail haulage rates for comparable distances.(35) Later the industry attempted to explain that the dividend figures were often misleading as they failed to take account of the gross undercapitalization of pipelines due to the provision of funds from the parent company. But, as Wolbert comments:(36)

> However, for our present purpose of determining whether profits (*ergo* rates) were too high, the argument over the base to be used is somewhat academic, inasmuch as capital investments on the lines under consideration have long since been returned in the form of dividends. Suffice it to say that nominal profits derived from transportation, reflected by dividends paid, were generally enormous prior to 1940.

This particular complaint, as will be discussed further,[37] has been remedied to some extent by the Elkins Act Consent Decree limiting the return on investment of pipeline companies.

In 1914, the United States Supreme Court held in *The Pipe Line Cases*[38] that common carriage in fact by pipelines carrying oil for several producers could be made common carriage in form within the provisions of the *Hepburn Amendment* to the *Interstate Commerce Act*.[39] The pipeline companies immediately sought to avoid the result of the decision by imposing "onerous shipping requirements".[40] As discussed earlier,[41] there are sound technical reasons for requiring minimum tenders but those imposed by these companies were so excessive as to bear no apparent relationship to such reasons. For example, a minimum tender of 100,000 barrels for a single shipment was required by the Standard Lines from the midcontinent field to the East as from 1914.[42] By 1916, the Federal Trade Commission reported that minimum shipment requirements had virtually precluded small oil producers and refiners from using pipelines.[43] Furthermore, the tariffs of major pipelines imposed other "service requirements" which, it was argued, denied free access. These included provisions that crude received was subject to being mixed with other shipments, limitations on the temperature, gravity and viscosity of the oil and "exemption clauses"

relating to losses in transit.[44] Finally, the pipelines frequently maintained only sufficient working tankage to receive, but not to store, deliveries from the shipper or connecting carriers making it necessary for a shipper to arrange for prompt acceptance by the consignee at the destination. Although this may have been justified to some extent on the principle that "storage of the goods being transported is a transportation service only to the extent that it is necessarily incidental to the transportation,"[45] *de facto* it imposed a severe restriction on the use of pipelines by outside shippers.

The two remaining aspects of the complaint of denial of independent access - ratable taking[46] and shippers' use of pipelines[47] - are perhaps spurious compared to those just considered. The first alleged that pipelines effectively prorationed production by selective buying and non-ratable taking, although Wolbert concluded that the evidence "points strongly toward ratable taking practices."[48] Selective buying probably resulted as much from the convenience of transporting from wells already connected to the pipeline gathering system as from the alleged interests of the pipelines in the wells selected. In any event, the blame for any resultant discrimination properly rested with the oil *purchaser* as the pipelines usually were carriers only. The allegation is important, however, as it demonstrates that common carrier provisions

may be useless in the absence of common purchaser provisions. After all, the question of transporting oil will arise only after the independent producer has negotiated a sale of his production. Guaranteed access to pipeline facilities is of little value to a producer who is denied access to markets.

The claim alleged under the heading of shippers' use of pipelines really consists of a factual statement that little use has been made of common carrier pipelines by outside shippers.(49) As such it is not traversable. In 1931, it was reported that more than 60 per cent of large integrated companies carried no outside oil and the remaining 40 per cent served only 129 shippers,(50) figures which would not be expected if there were true common carrier operation. However, the fact seems to be that for a variety of reasons outside shippers might not require any greater use of such pipelines.(51) In any event, the figures taken alone are not indicative of discriminatory practices.

(ii) Inequality of Competition:(52)

Another ground of complaint in the controversy over major integrated ownership of crude oil pipelines has been that unfair competition results from the inequalities which are inherent in such ownership. Briefly stated, the complaint is that an integrated company not only has the

advantages of reduced costs and efficiency in carrying its own crude oil or products but also makes a profit on carriage for its competitors. It is this complaint, together with the alleged creation of monopoly, to which proponents of divorcement of pipeline ownership from the other stages of the petroleum industry point.(53)

Where a pipeline is operated as a department of an integrated concern, or as a wholly-owned subsidiary, it necessarily transports its own oil at cost. Although charges above cost may be debited for pipeline carriage, such an entry is purely a matter of internal accounting. Any 'profit' realised will be paid to the parent concern but is of course to be set off against the higher charge which was necessary to realise a profit in the first place. The net overall result to the integrated concern is carriage at cost. However, a genuine profit may be returned on carriage for outside shippers by simply fixing tariffs at a level above the actual cost of carriage.

The danger which arises from this fact is that pipeline tariffs, although fixed at the same level for both the pipeline company's own oil and outside shippers' oil, may be fixed at such a high level as to effectively preclude external use of the line.(54) It has also led independents to complain that the integrated concerns are using the 'profits' realised on pipeline operation to subsidise production and refining activities, whereas the

independents must make each stage involved in the industry profitable in itself.(55) In view of the foregoing explanation that pipeline charges for the integrated concern's own oil must in the long run be at cost, there can be no question of 'subsidising' one or other of the various stages. In a truly integrated industry it is the overall results which disclose whether a profit is being returned or not as, in reality, there is only one profit-making activity. But, it is open to such concerns to use genuine profit on the shipment of outside oil for subsidising the producing or refining stages by either paying more for oil purchased for itself or charging less for the sale of its refined products. Thus, the independent might not only be faced with high pipeline tariffs but might also find that these result in the pipeline's parent outbidding him for crude oil supplies in the field or undercutting him in the sale of refined products.

The industry has argued in response that it is entitled to a profitable return on shipment of outside oil as it is thereby enabling the independents to conduct their operations with less capital than otherwise would be necessary.(56) However, even if it is agreed that the integrated concern is entitled to a reasonable return on the carriage of its competitor's goods,(57) two difficulties still remain. First, the capital investment on which the return is to be calculated is not readily ascertainable

and, secondly, the advantages inherent in integrated operation[58] are still not available to the outside shipper so that the problem of inequality of competition remains. The first of these problems has been answered to some extent by the provisions of the Elkins Act Consent Decree and is considered at a later stage.[59] The second, say the critics, can be remedied by divorcement of pipeline ownership from the major producing and refining companies, a remedy also considered later.[60]

(iii) Creation of Monopolies:

The alleged creation of monopoly through major integrated ownership of crude oil pipelines has loomed large in the pipeline controversy in the United States, due in part to the importance of the anti-trust legislation.[61] Much of the discussion on this issue will not, therefore, be directly relevant in Australia. However, some brief observations may be valuable as an indication of the potential for creating monopolies.

Control of transportation facilities has played an integral part in the development of monopolies from the earliest days of the petroleum industry. It was largely control of the railroads through the device of rebates that enabled Standard Oil of New Jersey to virtually monopolise the industry in its very infancy.[62] When the superiority of pipeline transportation asserted itself,

Standard Oil promptly moved into this field, thereafter realising that "its main advantage in transportation lay in control of trunk pipelines to the seaboard".(63) At one time, it controlled practically all pipelines between the oil fields east of California and the Atlantic Ocean.(64) But although Standard Oil dominated the early development of the industry, it was not alone in employing pipeline control as a means of furthering this domination. Other companies such as Texas, Shell, Gulf, Pure and Sun - all originally refining enterprises - integrated their activities to include pipeline transportation.(65)

Clearly, control of pipelines historically promoted the growth of monopoly in the petroleum industry. This fact resulted in the *Hepburn Amendment* to the *Interstate Commerce Act*(66) but it should be noted that this regulatory control was not prompted because the pipelines themselves were necessarily monopolistic but, rather, because they promoted monopoly in the industry generally. The distinction has been explained as follows:(67)

> [The pipeline amendment] does not prohibit the private operation of these pipelines because they *are* monopolies, but because such private ownership has proved itself to be the source of monopolies, because it contains *inevitable tendency* toward monopoly.

However, the *Hepburn Amendment* did not satisfactorily remedy the position so that in 1942 it was still possible to comment:(68)

> Control of the pipe lines now appears to be the nerve center of the oil empires, and the key to monopoly power in the industry.

This concludes consideration of the pipeline controversy. Undoubtedly, many of the allegations raised were exaggerated and not substantiated by the facts. But the important point for the purposes of this study is the very existence of the controversy. Whatever the justification for specific allegations, "students of the problem appear to be in substantial agreement that for a long period of years nonowners had an exceedingly difficult time obtaining access to pipeline transportation."(69)

SECTION III

REMEDIES

(i) Common Carrier Provisions:(70)

The first legislative attempt to deal with the problems involved in major integrated ownership of crude oil pipelines was the enactment of provisions imposing common carrier status on pipelines. This required them to carry all oil tendered without discrimination, subject of course to pipeline capacity.

The earliest pipelines voluntarily opened their facilities to general public use. When disputes between users of these lines arose, the courts quickly recognised

a resemblance between such activities and those of common carriers at common law.[71] Beard comments:[72]

> With the judiciary applying common law concepts to pipe lines, it was but a step for legislative bodies to modernize, amplify, and clarify these concepts and set up a formal system of administrative regulation of oil lines as common carriers. By the above process, the regulation of certain oil lines as common carriers came about more or less automatically.

However, the legislatures faced a constitutional problem before they could enact such provisions. The subjection of private property to public use without compensation to its owner violates the due process clause of the Fourteenth Amendment to the Constitution of the United States. It was thus necessary for some justification for legislative intervention to be found. Two solutions appeared, guided by "an old and fundamental American concept - that businesses affected with a public interest can be regulated by the government."[73] First, the pipeline companies themselves sought legislation granting the power of compulsory acquisition, or "eminent domain" as it is called in the United States, a power which it is competent for the States to grant for a public purpose. Thus, the first statutes imposed common carrier status in return for the power of eminent domain.[74] A similar return was exacted for the right to cross State lands. Secondly, some pipelines devoted their facilities to public use - thereby affecting them with a public interest - by offering

their facilities to the public for carriage for hire. However, although the States found justification to impose common carrier status on pipelines falling within these two classes, the larger problem lay with the trunk lines which invariably crossed State lines and, therefore, were beyond the reach of the States.

(ii) The Interstate Commerce Commission:

In 1906, Congress passed the *Hepburn Amendment* to the *Interstate Commerce Act*(75) providing for regulation by the Interstate Commerce Commission of all interstate pipelines which were deemed to be common carriers at law.(76) The industry responded by immediately employing two devices designed to avoid the application of the Amendment in particular cases. First, several companies - most notably the Standard Oil group - insisted on purchasing all oil before it entered their pipelines. Thus, they argued, they did not hold themselves out as transporters of independent oil and were not common carriers within the meaning of the Amendment.(77) Secondly, some companies adopted elaborate transfer systems at state boundaries designed to prevent them from being classified as engaging in interstate commerce. The arrangement worked as follows:(78)

> [T]he arrangement. . . was to have the common carrier company on one side of the border pump oil into tanks owned by it and located on

> the border, while the private carrier on the opposite side of the boundary would use its pumps to withdraw oil from the same tanks and convey it onward to its destination. The theory seems to have been that in this fashion the common carriers were not pumping oil 'across' state lines.

The Standard Oil interests organised their whole system for moving oil from the Appalachian fields to their refineries in this manner.

The Interstate Commerce Commission brought the matter to a head in a 1911 hearing entitled *In the Matter of Pipe Lines.*(79) The Commission adopted a wide interpretation of the *Hepburn Amendment* and concluded that all interstate pipelines were within its jurisdiction. As a result of this conclusion, the Commission ordered the interstate pipelines to file tariffs. Several companies responded by challenging the Commission's order in the Commerce Court(80) and, ultimately, the whole matter came before the Supreme Court in *The Pipeline Cases*(81) on appeal from the Commerce Court's decision.

The wide interpretation of the *Hepburn Amendment* by the Commission was upheld by the Supreme Court on the basis that the plain meaning of the Act was to include pipelines that were carrying oil offered to them. Despite the technicality of a forced sale to the carrier, the pipelines were engaged in transportation within the meaning of the Act. They were common carriers in substance and the Commission could therefore require them to become common

carriers in form.(82) The constitutional problem of deprivation of property without due process was solved by distinguishing between pipelines engaged in transportation at the time of the Act and those constructed thereafter. There could be no doubt, the Court said, as to the validity of the Act's application to the latter.(83) The problem of interruptions at State borders had been disposed of by the Commission's holding that the interruptions were not made "in good faith for some necessary purpose".(84)

The Commission's jurisdiction to regulate interstate pipelines as common carriers was thus affirmed. However, a long period of inactivity on the part of the Commission followed. All that was required was that the pipelines file tariffs with the Commission and these were accepted as presumptively fair.(85) The companies succeeded in evading "the substance of the decision by the imposition of high rates and onerous shipping requirements."(86) Indeed, there was little occasion for complaints to arise as the lines were in fact used principally by the shipper-owners.(87) However, some progress was made in standardising accounting procedures and ordinary competition in fact led to a reduction of pipeline charges.(88)

Then, in June, 1934, the Commission began its own investigation of rates and gathering charges culminating in the Commission's decision in 1940 in *Reduced*

Pipeline Rates and Gathering Charges.[89] The Commission ordered 37 crude pipe lines to show cause why an order should not issue reducing minimum tenders to 10,000 barrels and restricting rates so that earnings could not exceed eight per cent on the Commission's valuation of investment.[90] The Commission thus succeeded, albeit belatedly, in regulating high rates and the unfair service requirements which previously had restricted independent access to major trunk pipelines. However, around this time, the Department of Justice entered the picture by instituting proceedings resulting in the Elkins Act Consent Decree which warrants separate consideration because it attacked the problem at its root - the ownership of pipelines by major integrated companies.

(iii) The Elkins Act Consent Decree:

It will be recalled that one of the unfair competitive advantages arising from the major integrated ownership of crude oil pipelines is that they necessarily carry oil for shipper-owners at cost.[91] Furthermore, profits realised on the carriage of competitor's oil are passed on to the pipeline company's parent in the form of dividend declarations. During the course of the Temporary National Economic Committee, held from 1939 to 1941, members of the Federal Trade Commission and the Department of Justice alleged that such dividends constituted illegal

rebates. Although the Department's case was based on "tenuous legal theory",(92) the defendants relented(93) and on December 23, 1941, a consent decree was entered into by the United States, twenty major companies and fifty-nine pipeline companies.(94)

The consent decree provided that any payment above seven per cent on the carrier's valuation was illegal whereas the original suit had sought an order that *all* dividends were illegal rebates. Wolbert comments:(95)

> The theory behind this action presumably was that the "freezing" of all income over the permitted seven percent would bring about rate reductions, thereby reducing the competitive advantages held by shipper-owners over non-integrated firms to the seven percent figure deemed a reasonable return on the capital invested in the lines.

The decree was full of ambiguities and, in 1951, Wolbert concluded that it had not contributed measurably toward rate reduction while creating "a host of operating problems which in themselves justify a review of the decree."(96) The major problem turned on the question of what base should be used for calculating permissible dividend payments to shipper-owners.(97) More specifically, the question was whether the decree permitted dividend payments on total valuation or only on the equity-financed element of it. Finally, this question came to litigation and, in 1959, the companies' arguments thereon were upheld, a result which ended "even the limited usefulness of the

decree as a restrictive device".[98]

(iv) Divorcement:

Throughout the pipeline controversy, several observers have argued that the only complete solution to the problems inherent in major integrated ownership of pipelines is to be found in divorcement of pipeline ownership from ownership of the other stages involved in the petroleum industry.[99] The subject itself has resulted in a large volume of literature and proposals for legislative divorcement of pipelines were filed "almost routinely" in Congress from the early 1930's on but made no progress.[100] But as the details of divorcement proposals are very much involved with the anti-trust legislation in the United States, it will be sufficient for the purposes of this study to consider the arguments for and against the abstract principle of divorcement.

The leading proponent of divorcement was Professor Rostow[101] whose major complaint was stated as follows:[102]

> The chief weapon of the major companies for protecting their position in the market for crude oil is their ownership of pipelines, the indispensible link . . . between the oil well and the refinery.

He believed that rate regulation was neither a complete, nor even a very important partial solution to the problem.[103] He continued:[104]

> The level of pipe-line rates is . . . part of the process of market control, and is one of the weapons which permit the major companies to keep ultimate sale prices at a point which vindicates their nominal pipe-line charges. The level of pipe-line rates is a measure of the forces required to keep posted prices for crude at an appropriate minimum, and above all to keep independent refiners, who must depend on independent sources of crude, on relatively short and expensive rations of supplies . . . The major companies own the pipelines not only as a productive piece of capital equipment, but as a necessary element for the preservation of the special conditions of market structure in the petroleum industry on which price leadership and price maintenance ultimately rest.

Divorcement was thus a logical remedy.(105)

Wolbert rejected divorcement as a remedy.(106) He disputed Rostow's contention that the pipelines had been built as instruments of market control but saw them as a logical response by private capital to conditions encountered as a "competitive necessity."(107) He summarized his views on the effects of divorcement as follows:(108)

> Viewing divorcement of pipe lines by itself, the results to be expected appear unfavourable. There would seem to be little, if any, competitive gain on the part of independent refiners and jobbers, and detriment to independent producers and "wildcatters". The stability of independently operated pipe lines seems questionable. In all probability, rates would be higher than the present level due to overhead costs, uncertainty of continuous, high capacity operation, and the loss of co-ordination economies present in integrated operation. The consumer would be the ultimate recipient

> of these disadvantages which would be transmitted to him in the form of higher retail prices.

He concluded that any discrimination could be avoided by reducing the difference between the cost of transportation and the tariff rate to the point where it represented only a reasonable return on carrier investment "since the outside shipper is receiving transportation service at a reasonable charge and the shipper-owner is realizing the same return on his money which he would receive from any successful commercial venture."(109)

On balance, these arguments for and against divorcement seem to indicate that "divorcement *per se* would provide no answers" to the problems of the independent producers and refiners.(110) In any event they have not resulted in any successful legislation aimed at divorcement.

SECTION IV

REGULATION OF NATURAL GAS

(i) Background:

Apart from a few isolated instances of local use,(111) natural gas was originally regarded as a nuisance associated with the production of crude oil. Neither its own fuel value, nor the role which it plays in the

energy mechanisms of oil and gas reservoirs, was appreciated with the result that it was wastefully flared. However, commencing about 1930, the use of natural gas has undergone a revolution. Among the factors influencing this change have been the establishment of, or where they were already established, the enlarging of the authority of, state conservation agencies, technical developments in the pipeline industry such as the manufacture of thin-wall, large-diameter pipe, temporary shortages and increasing costs in the field of solid fuels and rapid development in the heavy chemical industry in which natural gas is a prime raw material.(112) Today, a shortage of natural gas has contributed to the energy crisis in the United States, necessitating the investigation of a possible natural gas transmission line from the Alaska North Slope to connect with the existing pipeline system at Edmonton, Alberta, at an estimated cost of up to $10 billion. Even so, most natural gas reserves, at least until more recently, have been discovered in the search for oil rather than for natural gas itself.(113)

The pipelines which are essential to the distribution of this valuable resource have been constructed historically by companies established for that particular purpose whereas, it will be recalled, most petroleum pipelines originated from the refiners.(114) This fact of "independent"(115) ownership of natural gas transmission

pipelines has avoided many of the problems associated with the latter. However, the distribution of natural gas is in the nature of a public utility which has from early in the industry's history attracted regulatory attention because of the risks of monopoly and the problems associated with an increasing demand for a relatively fixed supply.(116)

Some of the devices adopted in relation to crude oil pipelines are not satisfactory when applied to natural gas pipelines. For example, natural gas pipelines generally purchase the gas which they carry due to the necessity of committing supplies to markets.(117) This makes the application of the common carrier concept of dubious validity and, indeed, few gas pipelines act as common carriers.(118) Furthermore, the regulation of transmission tariffs is of little value for the same reason. Thus, the major means of supervising natural gas transmission pipelines in the United States has been by regulating prices of the natural gas itself.

(ii) The Natural Gas Act:

In 1938, Congress passed the *Natural Gas Act*(119) conferring on the Federal Power Commission wide regulatory powers over the natural gas industry. For many years a controversy raged over whether these powers extended to the regulation of producer sales to interstate pipelines, as the Act contained a specific exemption of "production

or gathering of natural gas".[120] The Commission consistently declined to assume jurisdiction[121] but, in its 1954 decision in *Phillips Petroleum Co. v. Wisconsin,*[122] the Supreme Court held that the Commission in fact had jurisdiction over interstate sales by natural gas producers and a corresponding obligation to regulate those sales in the public interest.[123]

It has been said that the primary practical problem which led to the passage of the Act was the great economic power of the pipeline companies as compared with that of the communities seeking natural gas reserves and that its primary aim was to protect consumers against exploitation.[124] In other words, the Act regulates the industry as a public utility, an aim which is declared by Section 1:[125]

> [I]t is declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

The Commission in fact regulates the industry mainly through the employment of two devices - the certificate of convenience and necessity to control entry into the natural gas pipeline industry[126] and direct regulation of interstate sales by independent natural gas producers.[127]

No company is to engage in the transportation or

sale of natural gas or construct any facilities unless the Commission has issued "a certificate of public convenience and necessity." Under Section 7(e), a certificate shall be issued:(128)

> . . . if it is found that the applicant is able and willing properly to do the acts and to perform the service proposed and to conform to the provisions of this chapter and the requirements, rules, and regulations of the Commission thereunder, and that the proposed service, sale, operation, construction, extension or acquisition, to the extent authorized by the certificate, is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied.

This 'barrier' to entry into the pipeline business may itself promote monopoly conditions. Once a particular pipeline is constructed, the entry of a second, competing line into those communities served by the first is virtually prohibited as the first company could simply undercut tariffs and, indeed, would practically be forced to do so to protect its investment. The community supplied by a gas pipeline would therefore be at the mercy of the pipeline company were it not for the provisions of the Act dealing with rate regulation, to be discussed shortly.

However, one further feature of section 7 should be noted before leaving the certificate of public convenience and necessity. The section provides that the Commission may direct a natural gas company to extend or improve

its transportation facilities, and to connect its facilities with, and sell gas to, any person authorized to engage in the distribution of gas. However, the Commission must find that no "undue burden" would be placed on the company and has no authority to give such a direction when to do so would impair the company's ability "to render adequate service to its customers".

Two sections deal primarily with rate regulation. Section 4 provides generally that all rates shall be just and reasonable and that companies are not to grant any undue preference, nor maintain any unreasonable difference in rates as between localities or classes of service. Schedules showing all rates are to be filed with the Commission. Whenever any new schedule is filed, the Commission has authority to conduct a hearing at which the burden of showing that any increased rate is "just and reasonable" is upon the natural gas company. Under section 5, the Commission is empowered to determine the just and reasonable rate whenever it finds that any rate charged in connection with the transportation or sale of natural gas is "unjust, unreasonable, unduly discriminatory, or preferential" but increases are to be ordered only in accordance with a new schedule filed by the Company. Jurisdiction over the sale of natural gas to interstate pipelines by independent producers falls on the Commission by virtue of the extension of section 5 to any contract affecting rates.

The Act thus vests extremely wide authority in the Commission to regulate the natural gas industry generally. However, the picture would not be complete without reference to the problems that the Commission has faced and the criticism that has been directed at it. The regulation of natural gas pipelines from the point of view of consumer prices requires the regulation of producer prices, but the Commission has experienced great difficulty in discovering a way to set ceiling prices without causing excessive demand, and in developing a system of administrative price review.(129) Furthermore, it has not been able to prevent producers from selling their gas at higher prices in intrastate markets beyond its jurisdiction. Further complicating its problems, the critics argue that the Commission has itself contributed to the present shortage of natural gas by attempting to maintain prices at a level below what would probably be the free market price. Artificially low prices, it is argued, have both increased demand and discouraged producers from developing new supplies, although the Commission has attempted to deal with the latter problem by setting different price ceilings for "new" and "old" gas. The debate is not yet resolved.

PART II

THE CANADIAN EXPERIENCE

Pipelines in Canada have not, in the past, provoked the controversy which has surrounded them in the United States of America. It is true that, in 1956, the Federal Government's conduct of debate in the House of Commons on the bill to establish the Northern Ontario Pipe Line Corporation contributed to its defeat at the following general election. However, the controversy centred more, although not entirely, around the tactics adopted by the Government in securing passage of the measure rather than the policy issues involved. The purpose of the bill[130] was to establish a corporation to construct part of a natural gas transmission line from the producing fields of Alberta to Eastern Canadian markets. The major part of the line was to be constructed by a private company, Trans-Canada Pipe Lines Ltd., but the Governments of Canada and Ontario had agreed to construct that part of the line through the extremely expensive region of Northern Ontario. The scheme proposed was for a corporation to construct this section of the line and be empowered to lease, with an option to purchase being given to the Trans-Canada Company. The bill also contained provisions for short-term loans to the company.

For reasons that are still not entirely clear, at the time notice of the measure was given in the House of Commons, the Government took the unprecedented step of indicating that closure would be employed in the subsequent debate.[131] It has been commented:[132]

> Thereupon the opposition parties opposed to the bill . . . began to introduce a series of dilatory motions and, by raising points of order and by forcing each question to a recorded vote, to obstruct passage of the bill. From that point the battle was joined.

Substantive issues arising from the proposal concerned the opposition parties. First, the issue of nationalism was raised by the wish of the company to pursue a route through the United States which, it claimed, it would be able to finance without government assistance. Secondly, the Government's proposal to assist the company by financing part of the line raised the issue of government ownership and precipitated allegations of a "hand-out". But although there was fire behind the smoke, "closure came to be the real issue of the debate."[133]

Until recently, the "great pipeline debate" was the only instance of major controversy over the regulation of oil and gas pipelines in Canada. A number of developments over the past few years, however, suggests that the history of relative tranquillity has been shattered and that the future development of Canadian pipelines will be anything but free from controversy. The country's past

policy of exporting substantial quantities of oil and gas to the United States by pipeline has been severely criticized[134] and the realization that the enjoyment of self-sufficiency has a limited future has already resulted in major changes in policy. The Federal Government has recently announced a policy of phasing out exports of oil to the United States and a year ago announced its intention to abolish its long standing policy of supplying that part of the country west of the Ottawa Valley with Canadian oil and importing offshore oil for the country's eastern markets. The existing crude oil pipeline system will be extended to the Montreal market where imported oil no longer offers significant savings due to the dramatic escalation in the costs of imported oil over the past fourteen or so months. At the same time, past policies with respect to the country's natural gas supplies are being reviewed in an atmosphere dominated by the proposal to construct a major natural gas pipeline from the Mackenzie Delta discoveries to southern markets and, possibly, linked with a pipeline from the American gas reserves at Prudhoe Bay, Alaska. The potential exploitation of Arctic island gas reserves also raises fundamental policy issues yet to be resolved.

All in all, these developments indicate that Canada is at the point of determining major new directions in its policy with respect to the exploitation of its

petroleum reserves and pipelines. The issues are inherently controversial, involving as they do the competing interests of the petroleum industry in maintaining high cash flows by rapid exploitation at free market prices and the interests of consumers in ensuring adequate returns from their resources, and in protecting their longer term supply position.

In a federal state, controversy also surrounds the question of balancing federal and provincial interests. The Canadian Federal Government is presently seeking to extend federal control with respect to oil through legislation establishing regulation of interprovincial marketing of crude oil produced in Canada.(135) With respect to natural gas, too, conflicts between the consumer interests in the east and producing interests in the west suggest that there may be pressure on the Federal Government to empower the National Energy Board to exercise control over producer prices of gas, as the Federal Power Commission has attempted to do in the United States.

Thus, it is to be reasonably anticipated that the future development of Canadian policy with respect to oil and gas pipelines will be significantly different from that of the past. The Australian pipeline legislation, however, has borrowed in part from the past Canadian legislation and it is proposed, therefore, to consider in this Part the broad policy of that legislation but, before

proceeding to do so, one further comment should be made, emerging from recent Canadian developments.

The exploitation of Canada's "frontier" reserves of natural gas will involve vast capital investment in pipeline construction. One proposal for construction of a pipeline from the Mackenzie Delta gas reserves, for instance, estimates a cost in excess of $6 billion. Sums of such magnitude are obviously beyond the resources of any one company and will likely involve a pooling of the financial resources of producing, distributing and marketing companies. This, in turn, may involve a departure from the past practice with respect to natural gas pipelines of the pipeline company acting as a purchaser of the gas which it transports,(136) inasmuch as the company will probably have producing and marketing interests among its membership and will operate more as a service to those interests. The leading proponent of the Mackenzie Valley line, Canadian Arctic Gas Study Ltd., is a consortium of producing companies, other gas pipeline companies and gas distribution utilities,(137) and proposes to act as a carrier only of Mackenzie Delta gas.

SECTION I

REGULATION OF OIL PIPELINES

(i) Provincial:

Generally, the Canadian provincial legislation controls pipelines at two stages - construction and operation. In Alberta, for example, the construction of either natural gas or oil pipelines is prohibited except under the authority of a permit granted by the Energy Resources Conservation Board.(138) The Board may refer an application for a gas pipeline to the Gas Utilities Board, but is under no obligation to consider its advice(139) and otherwise has an unlimited discretion to grant or refuse any application.(140)

In other Provinces, however, the legislation is more specific as to the matters which are to be considered by the authority granting the permit. In Saskatchewan, for example, the Minister is to have particular regard to the financial responsibility of the applicant, any public interest that may be affected and "the needs and general good of the residents of the province as a whole."(141) In this respect, a permit resembles the certificate of public convenience and necessity under the American *Natural Gas Act*(142) and, so viewed, controls entry into the pipeline business.

The operation of pipelines generally is prohibited except in pursuance of a licence issued for that purpose.(143) This requirement seems to be aimed at the safe operation of pipelines rather than controlling entry into pipeline transportation or the terms of carriage from an economic viewpoint.

The major provision in the Canadian provincial legislation designed to avoid the problems which have arisen in the United States is the power to designate pipelines as common carriers. In the major oil-producing Province of Alberta, this power is vested in the Energy Resources Conservation Board upon application and after a hearing.(144) Once declared to be a common carrier, the owner of a pipeline is prohibited from any discrimination between any of the persons for whom he carries oil or gas, or in favour of his own oil or gas.(145) In addition, the Board may declare any purchaser of oil or gas to be a common purchaser, in which event he is to purchase without discrimination,(146) and may declare a processor to be a common processor.(147)

These provisions obviously are aimed at resolving the problem of access to transportation facilities for independent producers and refiners. But it should be emphasized that the approach differs from that taken in the United States, at least in relation to interstate pipelines in that country.(148) The Alberta legislation does not

impress common carrier status on all pipelines, or even those which in fact operate as common carriers but, rather, empowers a regulatory agency to impose common carrier status on particular pipelines and then only on application. Its effect, of course, is to induce the pipeline companies to be "voluntary" common carriers under threat of having that status otherwise imposed upon them.

Two other provisions in the Alberta legislation are aimed directly at the problems of denial of independent access and inequality of competition. First, the Public Utilities Board is empowered to fix the "just and reasonable" rates for transporting oil by pipeline.(149) Secondly, where a common carrier or common purchaser order is made and the parties are unable to agree on the tariff or cost, they may apply to the Public Utilities Board to have the dispute settled.(150) In practice, tariffs for oil transportation are not regulated under the first of these provisions.(151) Indeed, in view of the latter provision, tariff regulation may be unnecessary. The problem of fixing tariffs for carriage of crude oil only arises where oil is carried for shippers other than the pipeline owner. If the outside shipper is dissatisfied with the proposed tariffs, it would appear he is adequately protected by his right to apply to the Public Utilities Board.

Apart from control of the original entry into pipeline transportation, the only provisions in the

legislation designed in any way to avoid the problem of monopoly growth through pipeline ownership are those controlling transfers of pipelines[152] but the effect of these is indirect only.[153]

(ii) Interprovincial Pipelines:

Pipelines within the jurisdiction of the National Energy Board are subject to much closer regulation, under the provisions of the *National Energy Board Act*,[154] than are intraprovincial pipelines. Although entry into the pipeline business is controlled by basically the same means as under the provincial legislation by requiring a certificate for operation of a pipeline[155] and leave to open a pipeline,[156] the matters which the Board is to consider in certifying such entry are more specific. First, it must be satisfied that the line is and will be required by "the present and future public convenience and necessity."[157] Secondly, in considering any application, it is to have regard to the following matters:[158]

> (a) the availability of oil or gas to the pipe line. . .;
>
> (b) the existence of markets, actual or potential;
>
> (c) the economic feasibility of the pipe line. . .;
>
> (d) the financial responsibility and financial structure of the applicant, the methods of financing the line and the extent to which Canadians will have an opportunity

> of participating in the financing, engineering and construction of the line; and
>
> (e) any public interest that in the Board's opinion may be affected by the granting or the refusing of the application.

Furthermore, the Board is under a positive duty to consider the objections of any interested persons.(159)

Once operational, a pipeline certified under the Act is required to file tariffs, which may be disallowed by the Board,(160) for the transportation and storage of hydrocarbons.(161) Thus, the power to regulate tariffs directly is vested in the Board. But even in the absence of a Board order, tariffs are to be just and reasonable and shall "under substantially similar circumstances and conditions with respect to all traffic of the same description carried over the same route, be charged equally to all persons at the same rate."(162) The problem of denying access to the pipeline by imposing onerous service requirements is met by prohibiting discrimination against any person or locality in tolls, service or facilities.(163) Offering or accepting any rebate, concession or discrimination is an offence punishable on summary conviction.(164)

Subject to exceptions approved by the Board, a pipeline is to carry all oil offered for transmission and may be required to extend its facilities for the transmission of such oil, including storage facilities, if it is in the public interest and no undue burden will be placed on

the pipeline company thereby.[165] Not only does this requirement impose common carrier status on all pipelines certified under the Act but enlarges the ordinary responsibilities of a common carrier by granting the power to require extension of pipelines and storage facilities.

These provisions appear to provide complete protection against the problems which have plagued the development of oil pipelines in the United States. The only possible exception is the argument of some that divorcement is the only means to protect against the advantages inherent in integrated ownership of pipelines. But as discussed earlier,[166] the results which would flow from such a course are not entirely settled. Perhaps the fact that oil pipelines in Canada have not provoked the controversy which has surrounded them in the United States testifies to the success of this legislation. If so, one wonders why the Australian legislation, borrowing in part as it has done from the Canadian precedent, has not followed the precedent faithfully. After all, it is submitted, the petroleum industry would not suffer if such provisions were enacted, except by being deprived of the opportunity to establish monopolies at the expense of smaller independents, while protection against the potential problems considered earlier would be virtually guaranteed. However, further consideration of this question must be stood down until the existing Australian legislation is examined.

SECTION II

REGULATION OF NATURAL GAS PIPELINES

The Canadian legislation controlling entry into oil pipeline transportation and regulating the technical aspects of pipeline operation generally applies equally to natural gas transmission lines.(167) However, as in the United States, the pattern in Canada has been to regulate the production and distribution of natural gas as a public utility. It is proposed in this Section, therefore, to consider some of the statutory provisions relating to natural gas only. By and large these relate to pricing of natural gas.

(i) Provincial:

Again taking Alberta as an example, the Public Utilities Board is empowered to regulate the price of natural gas at each point from production to consumption.(168) The other Provinces regulate consumer prices for natural gas but only two of them authorize price control at stages before delivery to consumers. In Saskatchewan the wellhead price may be fixed(169) while in Ontario, the Energy Board is empowered to fix "just and reasonable rates and charges for the sale of gas by transmittors, distributors and storage companies"(170) but no reference is made to

sales by producers so that the well-head price is not regulated as such. As in the United States, considerable difficulty surrounds the question of what method is to be used in fixing prices under these provisions.(171)

(ii) Federal Regulation of Natural Gas:

Interprovincial transmission of natural gas is regulated by the same provisions of *The National Energy Board Act* as control oil pipelines. However, unlike the jurisdiction of the Federal Power Commission in the United States, the power of the Board to regulate charges for carriage of natural gas does not extend to the fixing of well-head prices.(172) In fact, with the exception of jurisdiction to fix the proportion of the difference between the purchase price and the sale price of gas, owned by a pipeline company, which is to be attributed to a toll charged for transmission,(173) the power to fix charges for the carriage of natural gas is the same as for oil.

Perhaps the major function of the Board in relation to natural gas is to license exports after satisfying itself that the quantity exported does not exceed the surplus remaining after making due allowance for foreseeable requirements in Canada and that the price to be charged is "just and reasonable in relation to the public interest".(174) However, as no question of foreign exports by pipeline will arise in Australia these provisions are only of passing interest to this study.

FOOTNOTES - CHAPTER III

(1) The Dutson to Dandenong pipeline was completed in January, 1969. The Roma to Brisbane pipeline was completed by June, 1969. The Gidgealpa-Moomba to Adelaide pipeline commenced deliveries in November, 1969, and the Dongara to Perth line was operating by October, 1971.

(2) The Moonie to Brisbane pipeline.

(3) Hetherington, *The Orderly Development of Petroleum in Victoria*, a Report to the Premier of Victoria, March, 1966.

(4) Hetherington, *Energy Resources of Queensland and their Uses*, a Report to the Premier of Queensland, December, 1964.

(5) *See* Parliamentary Paper No. 102 (South Australia), *Finance for a Natural Gas Pipeline in South Australia* (1966).

(6) *See*, for example, Parliamentary Debates of Western Australia, October 29, 1969, at pp. 1938, 1939.

(7) *See*, for example, Parliamentary Debates of South Australia, House of Assembly, March 7, 1967, at p. 3461; Legislative Council, March 14, 1967, at p. 3587.

(8) *See* Chapter IV, Section II, *infra* at pp. 107 *et seq.*

(9) For a general account of the historical development of pipelines *see* Wilson, *Oil across the World, The American Saga of Pipelines*, at pp. 11-39 (1946).

(10) The Buckeye Pipe Line Company, *The Flow of Oil*, at p. 7 (1961).

(11) *Id.*

(12) Wilson, *op. cit.*, *supra* n. 9, at pp. 44-8; *see* also, The Buckeye Pipe Line Company, *op. cit.*, *supra* n. 10, at p. 9.

(13) Wilson, *op. cit.*, *supra* n. 9, at p. 47.

(14) On the development of long distance pipelines generally, *see* Wilson, *op. cit.*, *supra* n. 9, at pp. 48-53.

(15) Early pipelines were laid on the surface. If laid in summer, when winter came they were torn apart by contraction. Similarly, if laid in winter, they were twisted and buckled in summer. Wilson, *op. cit., supra* n. 9, at p. 49.

(16) *Id.*, at p. 51.

(17) Tarbell, *The History of the Standard Oil Company*, briefer version ed. by Chalmers, at pp. 100-2 (1966).

(18) The development of natural gas pipelines is considered in Section IV, *infra*, at pp. 65-7.

(19) Interstate Commerce Commission, *Transport Statistics in the United States*, year ended December 31, 1968, Part 6, Oil Pipe Lines. These figures refer only to pipelines reporting to the Interstate Commerce Commission, *i.e.*, most interstate pipelines. *See* Section III(ii), *infra*, at pp. 58 *et seq.*

(20) Ball, *This Fascinating Oil Business*, at p. 173 (1940).

(21) Both the first oil pipeline constructed by the Oil Transportation Association and the Columbia Conduit Line began operations as common carriers. Wilson, *op. cit., supra* n. 9, at pp. 47, 48.

(22) "The general term 'integration', when used with respect to corporate growth and development, can perhaps best be defined as the process of extending the scope of the activities which are under the ownership, management or control of a single company. In the oil industry, as in many other industries, it is useful to distinguish among three general types of integration: horizontal, vertical and product integration.

Horizontal integration or combination is the process of extending a company's activities in fields in which it is already engaged. . .

Vertical integration, in its simplest form, is the process of increasing the number of distribution and processing steps in an industry's cycle of activities which are under the ownership, management, or control of a single company. . .

Product integration, more commonly referred to as product diversification, is the process of increasing the scope of a company's activities by the manufacture or distribution of additional product lines."

McLean and Haigh, *The Growth of Integrated Oil Companies*, at pp. 7-8 (1954). There are four branches to complete vertical integration in the petroleum industry: production, transportation, refining and marketing.

(23) For example, the United States Pipe Line Company joined producing and refining groups in the formation of the Pure Oil Company. McLean and Haigh, *op. cit., supra* n. 22, at p. 181.

(24) *Op. cit., supra* n. 22, at p. 181.

(25) Wolbert, *American Pipe Lines*, at p. 9 (1951). The companies listed, in order of their assets as at December 31, 1938, are: (1) Standard Oil Co. (N.J.); (2) Socony-Vacuum Oil Co. ; (3) Standard Oil Co. (Ind.); (4) The Texas Corp.; (5) Standard Oil Co. of California; (6) Gulf Oil Corp.; (7) Cities Service Co.; (8) Shell Union Oil Corp.; (9) Consolidated Oil Corp.; (10) Phillips Petroleum Co.; (11) Tide Water Associated Oil Corp.; (12) Atlantic Refining Co.; (13) The Pure Oil Co.; (14) Union Oil Co. of California; (15) Sun Oil Co.; (16) Ohio Oil Co.; (17) Continental Oil Co.; (18) Standard Oil Co. (Ohio); (19) Mid-Continent Petroleum Corp.; and (20) The Skelly Oil Co.

(26) Wolbert, *op. cit., supra* n. 25, at pp. 9-13. *See* also, McLean and Haigh, *op. cit., supra* n. 22, Chapter VII.

(27) Wolbert, *op. cit., supra* n. 25, at p. 12.

(28) *See* Section III(i), *infra*, at pp. 56-8.

(29) *See* generally, Wolbert, *op. cit., supra* n. 25, at pp. 13-48; Cookenboo, *Crude Oil Pipe Lines and Competition in the Oil Industry*, at pp. 1-6, 78-80, 80-87, 93-96, 112-120, 142-145 (1955).

(30) *Op. cit., supra* n. 25, at p. 13.

(31) For example, Wolbert, *op. cit., supra* n. 25, at pp. 13-14; Beard, *Regulation of Pipe Lines as Common Carriers*, at pp. 75-81 (1941); Johnson, *Petroleum Pipelines and Public Policy, 1906-1959*, at pp. 215, 216, 221, 237, 275-6, 281 (1967); Cookenboo, *op. cit., supra* n. 29, at pp. 96-102.

(32) Wolbert, *op. cit., supra* n. 25, at pp. 13-4.

(33) Beard, *op. cit.*, *supra* n. 31, at p. 77.

(34) Larson and Porter, *History of Humble Oil and Refining Company*, at pp. 165-6 (1959).

(35) Wolbert, *op. cit.*, *supra* n. 25, at p. 17.

(36) *Id.*, at p. 15.

(37) Section III(iii), *infra*, at pp. 61-3.

(38) 234 U.S. 548 (1914).

(39) Section III(ii), *infra*, at pp. 58-61.

(40) Wolbert, *op. cit.*, *supra* n. 25, at p. 23.

(41) Chapter II, Section II(ii), *supra*, at pp. 22-5.

(42) Wolbert, *op. cit.*, *supra* n. 25, at p. 23.

(43) Beard, *op. cit.*, *supra* n. 31, at p. 94.

(44) Wolbert, *op. cit.*, *supra* n. 25, at pp. 22-39.

(45) *Id.*, at p. 40.

(46) *Id.*, at pp. 41-3.

(47) *Id.*, at pp. 43-8.

(48) *Id.*, at p. 43.

(49) *Id.*, at pp. 43-8.

(50) *Id.*, at pp. 43-4.

(51) The reasons include the facts that many independent refiners are situated in production areas and thus do not require the facilities of trunk pipelines and that capital investment is tied up in line fill. But of course the extent of independent use does not go to the validity of complaints by those desiring to use the lines.

(52) *See* generally, Wolbert, *op. cit.*, *supra* n. 25, at pp. 49-58.

(53) Section III(iv), *infra*, at pp. 63 *et seq.*

(54) In some situations, however, the company may wish to keep its pipeline tariffs as low as possible

for taxation reasons. *See* Beard, *op. cit., supra* n. 31, at p. 81.

(55) Wolbert, *op. cit., supra* n. 25, at p. 57.

(56) *Id.*, at p. 54.

(57) There may be a public policy question involved here as to whether a shipper-owner ought to be allowed a profit on the carriage of its competitor's goods. There is precedent in the United States for a negative answer in the *Commodities Clause of the Hepburn Act* making it unlawful for railroads to carry any commodity which the railroad has made or in which it has any interest.

(58) Some of these "advantages" in fact are beneficial to the independents. For example, a large concern may well be more willing to make new connections. *See* generally, Cookenboo, *op. cit., supra* n. 29, at pp. 83-5, 90-1, 126-7, 130; de Chazeau and Kahn, *Integration and Competition in the Petroleum Industry*, at pp. 274-5, 279-303 (1959).

(59) Section III(iii), *infra*, at pp. 61 *et seq.*

(60) Section III(iv), *infra*, at pp. 63 *et seq.*

(61) *See* generally, Wolbert, *op. cit., supra* n. 25, at pp. 59-104.

(62) *See* generally Tarbell, *op. cit., supra* n. 17. The practice allegedly adopted by Standard Oil was to take a rebate on carrying charges from the railroads which other shippers were not granted. One agreement between the company and the railroads allegedly provided, not only for a rebate on Standard's own oil, but in addition a per barrel penalty to be paid by the railroads on oil which they carried for other shippers! As a result of these practices Standard Oil completely dominated the oil regions and accumulated vast wealth. The personal wealth assembled by Standard's founder, John D. Rockefeller, prompted Walter Lippman to comment: "Never before had one man become so wealthy and thereafter it was the policy of the U.S. that no other man would."

(63) Williamson and Daum, *The American Petroleum Industry: The Age of Illumination 1859-1899*, at p. 452-3 (1959).

(64) *The Pipe Line Cases*, 234 U.S. 548, at p. 559 (1914).

(65) Wolbert, *op. cit.*, *supra* n. 25, at p. 12.

(66) Section III(ii), *infra*, at pp. 58 *et seq.*

(67) Johnson, *op. cit.*, *supra* n. 31, at p. 77, quoting Assistant Attorney General Winfred T. Denison.

(68) Comment, 51 Yale L.J. 1338, at p. 1347 (1942).

(69) Hamilton, *Competition in Oil*, at p. 73 (1958).

(70) *See* generally, Beard, *op. cit.*, *supra* n. 31.

(71) *See*, for example, *National Transit Company v. Weston*, 121 Pa. 485 (1880); *Samuel Griffin v. South West Pennsylvania Pipe Lines*, 172 Pa. 580 (1896).

(72) *Op. cit.*, *supra* n. 31, at pp. 10-11.

(73) *Id.*, at p. 29. The concept is not, of course, exclusively American.

(74) The first bill imposing common carrier status in return for the power of eminent domain was introduced in the Pennsylvania Legislature in 1868 but was rejected. *See* Johnson, *The Development of American Petroleum Pipelines*, at p. 17 (1956). The first successful attempt appears to have been an act passed by the Ohio legislature on April 29, 1872. *Id.*, at p. 24.

(75) United States Code, Title 49, Chapter 1.

(76) The Amendment did not itself impose common carrier status on all pipelines engaged in interstate commerce as claimed by Wolbert, *op. cit.*, *supra* n. 25, at p. 51.

(77) Hamilton, *op. cit.*, *supra* n. 69, at p. 73.

(78) Beard, *op. cit.*, *supra* n. 31, at pp. 50-1.

(79) 24 I.C.C. 1 (1912). *See* generally, Wolbert, *op. cit.*, *supra* n. 25, at pp. 117 *et seq.*

(80) *Prairie Oil and Gas Company v. United States*, 204 Fed. 798 (Comm. Ct. 1913).

(81) 234 U.S. 548 (1914).

(82) *Id.*, at p. 561.

(83) *Id.*

(84) *See* Wolbert, *op. cit.*, *supra* n. 25, at pp. 117-8.

(85) *Id.*, at p. 136. One reason for the Commission's inactivity in this period was the fact that it lacked sufficient funds for its Bureau of Valuations to conduct the valuations necessary to determining the fairness of rates. *Id.*, at pp. 139-140.

(86) Hamilton, *op. cit.*, *supra* n. 69, at p. 73. Discussed earlier in Section II(i), *supra*, at pp. 47 *et seq.*

(87) Section II(i), *supra*, at p. 51.

(88) Wolbert, *op. cit.*, *supra* n. 25, at pp. 138, 143-4.

(89) 243 I.C.C. 115 (1940).

(90) *See* Wolbert, *op. cit.*, *supra* n. 25, at pp. 133 *et seq.*

(91) Section II(ii), *supra*, at p. 52.

(92) Williamson *et al.*, *The American Petroleum Industry, The Age of Energy 1899-1959*, at p. 598 (1963). *See* also, Wolbert, *op. cit.*, *supra* n. 25, at p. 447.

(93) Williamson suggests, *op. cit.*, *supra* n. 92, at p. 599, the following reasons: "First, coming in the wake of the ICC order to reduce rates and gathering charges, the cases represented another attempt to restrict the integrated firms in an area where they had enjoyed a freedom from competitive and government restraints considerably greater than in producing or refining. If the courts adopted the Justice Department's original position, for example, parent companies would no longer have been free to decide what proportion of the profits of pipelines affiliates would go as dividends to shareholders. Although stockholders of the parent company would still benefit from pipeline earnings through appreciation in the value of shares, it was at least conceivable that restrictions on dividend payments could at times affect a firm's ability to raise funds in the capital markets. Moreover, if the Justice Department was successful, the case threatened to open a Pandora's box of technical problems

the solution of which might further restrict intra-firm allocation of funds. Once established, the precedent might pave the way for future courts to decide that interest on loans paid by a pipeline affiliate to its parent, or transfers of funds realized by the sale of capital assets, should also be proscribed. Perhaps the most important reason, however, was that the Elkins Act cases, combined with the Mother Hubbard suit, represented the climax of a growing trend of antagonism towards the industry in some agencies of the federal government. The industry was undoubtedly concerned that success in the rebate case would encourage the Antitrust Division to press for more drastic relief in the Mother Hubbard suit." The "Mother Hubbard" suit, filed at the same time as the suit resulting in the Elkins Act Consent Decree, charged 22 major integrated oil companies and the American Petroleum Institute with engaging in a host of activities designed to fix prices and restrict competition. *See* further *id.*, at p. 597.

(94) Wolbert, *op. cit.*, *supra* n. 25, at p. 147.

(95) *Id.*, at pp. 146-7.

(96) *Id.*, at pp. 159-60. Williamson, *op. cit.*, *supra* n. 92, at p. 601, comments: "A look at pipeline earnings in the decade of the 1940's suggests that these measures [the Consent Decree and the I.C.C. order] were partially successful in reducing carrier profits. Although realization per thousand barrel-miles decreased little after 1940-41, inflation increased costs so that before-and-after tax returns fell steadily, particularly in the post-war period. Not all of the reduction, of course, can be attributed to the I.C.C. regulation and the consent decree. Higher federal taxes were responsible for a large portion of the post-1940 decline, while more effective proration procedures also made the lives of the fields more predictable, thus making it more difficult for the lines to justify earnings on the basis of risk. Nonetheless, it seemed likely that closer public regulation was in some measure responsible for greater restraint by the carriers."

(97) *See* generally, Wolbert, *op. cit.*, *supra* n. 25, at pp. 147-159.

(98) Johnson, *op. cit.*, *supra* n. 31, at p. 473.

(99) Apart from the other works cited in the footnotes to this Chapter, *see* generally: Shuman, *The Petroleum Industry*, at pp. 113-115 (1940); Black, *Oil Pipe Line Divorcement by Litigation and Legislation*, 25 Cornell L.Q. 510 (1939-40); Rostow, *A National Policy for the Oil Industry*, Parts III and V (1948); Rostow and Sachs, *Entry into the Oil Refining Business: Vertical Integration Re-examined*, 61 Yale L.J. 856 (1952).

(100) Johnson, *op. cit.*, *supra* n. 31, at p. 421.

(101) *Op. cit.*, *supra* n. 99.

(102) *A National Policy for the Oil Industry*, *supra* n. 99, at p. 57.

(103) *Id.*, at pp. 62-3.

(104) *Id.*, at p. 65-6.

(105) *Id.*, at p. 145. He in fact advocated vertical disintegration into the four segments of producing, refining, transportation and marketing together with horizontal disintegration of the very large companies in each stage of the industry.

(106) *Op. cit.*, *supra* n. 25.

(107) *Id.*, at p. 161.

(108) *Id.*, at p. 104.

(109) *Id.*, at p. 163.

(110) Johnson, *op. cit.*, *supra* n. 31, at p. 418.

(111) Interestingly, among the first of these was the use of natural gas at Roma, Queensland, which was lit with street lamps burning natural gas in 1906. However, the flow stopped after 10 days. *The Journal of Industry*, Natural Gas Issue, November, 1969, at p. 37. Subsequently, a second discovery of natural gas was used for several years from 1927 for the extraction of gas liquids. The petroleum recovered retailed in Roma for 20 cents a gallon. Associated Pipelines Limited, *Natural Gas Comes to Brisbane*, March 17, 1969.

(112) *Field Handling of Natural Gas*, at p. 2 (1956).

(113) This is partly explained by the fact that natural gas is a hydrocarbon which occurs in the same geological structures as crude oil and, in any event, two-fifths of the world's gas production is associated with oil occurrence. *The Journal of Industry*, Natural Gas Issue, November, 1969, at p. 22.

(114) Section II, *supra*, at pp. 45-6.

(115) Not all the pipelines are truly independent. In 1940, eight major interstate pipelines produced more than 47 per cent of the gas they sold in interstate commerce. Swift, *Federal Power Commission Regulation of Interstate Sales by Independent Natural Gas Producers*, 10 South Texas L.J. 183, at p. 185 (1967-68). *See* also, the comments in Part II, *infra*, at pp. 76.

(116) These two issues have been formulated as follows: "Has there been, or is there likely to be, such a degree of concentration in the ownership of natural gas reserves or of monopolistic market control in the field sales of natural gas that competitive forces are, or will be, insufficient to prevent the exploitation of ultimate consumers, thus requiring the regulation of natural gas field prices? . . . Assuming adequate, workable competition in the gas field and thus setting aside the monopoly issue, shall the scarcity returns or economic returns which arise with an increasing demand for the relatively fixed supply of a depleting natural resource accrue to the private owners of gas reserves or be subject to social appropriation for the benefit of either consumers or the general public?" Neuner, *The Natural Gas Industry*, at pp. *xviii-xix* (1960).

(117) Chapter II, Section II(iii), *supra*, at pp. 25-6.

(118) *See* generally, Beard, *op. cit.*, *supra* n. 31, at pp. 21-4. Beard found only one instance where any attempt was made to file a tariff for a common carrier natural gas line. *Id.*, at pp. 57-8. But he also found that natural gas lines were classified as common carriers in a third of the states. *Id.*, at p. 150.

(119) United States Code, Title 15, Chapter 15B.

(120) *See* generally, Benton, *Jurisdiction of the Federal Power Commission and of State Agencies in the Regulation of the Electric Power and Natural Gas Industries*, 14 Geo. Washington L. Rev. 53 (1945-46); Comment, *Federal Price Control of Natural Gas Sold*

to Interstate Pipelines, 59 Yale L.J. 1468 (1949-50); McLane, *Jurisdiction of the Federal Power Commission over Production and Gathering of Gas*, 28 Tulane L. Rev. 343, 462 (1954).

(121) Swift, *loc. cit.*, *supra* n. 115, at pp. 184, 186.

(122) 347 U.S. 672 (1954).

(123) *See* generally, Comment, *Extension of Federal Regulation of Natural Gas Production*, 40 Cornell L.Q. 328 (1954-55).

(124) *Sunray Mid-Continent Oil Co. v. Federal Power Commission*, 80 S. Ct. 1392; 364 U.S. 137 (1960). *See* also, *Federal Power Commission v. Interstate Natural Gas Co.*, 69 S. Ct. 775; 336 U.S. 577 (1949). In *Atlantic Refining Co. v. Federal Power Commission*, 316 F. 2d 677 (1963), the Court said: "In passing this chapter, Congress intended that natural gas should be sold in interstate commerce for resale for ultimate public consumption for domestic, commercial, industrial, or any other use at the lowest possible reasonable rate consistent with maintenance of adequate service in the public interest." Neuner, *op. cit.*, *supra* n. 116, at p. 280, concludes: "As far as the facts and analyses of this study have been able to show, the requisite condition of monopoly is difficult to find. It is not that the investigation has been unable to discover any element of market power, or that regulatory intervention of any kind is unnecessary. Rather, it is a case where the degree of market power on the seller side of the field market simply does not appear great enough to warrant the application of public price controls. If field price regulation - on a utility cost standard or otherwise - is to be sanctioned, it must be founded on something besides a claim of monopoly behaviour or excess concentration among gas producers."

(125) *Supra* n. 119.

(126) *See* Notes, *Control of Entry into the Natural Gas Pipeline Industry: The FPC and the Certificate of Convenience and Necessity*, 28 Indiana L.J. 587 (1952-53).

(127) *See* Swift, *op. cit.*, *supra* n. 115.

(128) *Supra* n. 119.

(129) *See* generally, Breyer and Macavoy, *Energy Regulation by the Federal Power Commission* (1974).

(130) Enacted as the *Northern Ontario Pipe Line Crown Corporation Act*, S.C. 1956, c. 10, repealed S.C. 1967-68, c. 31.

(131) The Government had set a dead-line for passage of the bill but this does not explain why notice of intention to employ closure was given at such an early stage in the proceedings.

(132) Mallory, *Case and Comment*, 34 Can. Bar Rev. 714, at p. 717 (1956).

(133) *Id.*, at p. 719. *See* also, Creighton, *Canada's First Century*, at pp. 293-6 (1970).

(134) *See*, for example, McDougall, *The Canadian National Energy Board: Economic Jurisprudence in the National Interest or Symbolic Reassurance?*, 11 Alta. L. Rev. 327 (1973).

(135) Bill C.-32.

(136) *Supra* n. 117.

(137) The members of the consortium are: Alberta Gas Trunk Line Co. (possibly withdrawn); Alberta Natural Gas Co. Ltd.; Atlantic Richfield Co.; Canadian Development Corp.; Canadian National Railways Co.; Canadian Pacific Investments; Canadian Superior Oil Ltd.; Canadian Utilities Ltd.; Colorado Interstate Corp.; Columbia Gas Transmission Corp.; Consumers Gas Co.; Exxon Co. U.S.A.; Gulf Oil Canada Ltd.; Imperial Oil Ltd.; Michigan Wisconsin Pipe Line Co.; Natural Gas Pipeline Co. of America; Northern and Central Gas Corp.; Northern Natural Gas Co.; Numac Oil and Gas Ltd.; Pacific Lighting Gas Development Co.; Panhandle Eastern Pipe Line Co.; Pembina Pipe Line Ltd.; Shell Canada Ltd.; Standard Oil Co. (Ohio); Texas Eastern Transmission Corp.; Transcontinental Gas Pipeline Corp.; Trans Canada Pipelines Ltd.; Union Gas Ltd.

(138) The *Pipe Line Act*, R.S.A. 1970, c. 275, section 5; *cf.* the *Pipe Lines Act*, R.S.S. 1965, c. 413, section 7 (Sask.); the *Gas Pipe Line Act*, R.S.M. 1970, c. G50, section 14 and the *Pipe Line Act*, R.S.M. 1970, c. P70, section 5 (Man.).

(139) The *Pipe Line Act*, *supra* n. 138, section 9.

(140) *Id.*, section 10.

(141) The *Pipelines Act*, *supra* n. 138, section 11; *cf.*, the *Gas Pipe Line Act* of Manitoba, *id.*, section 17.

(142) Part I, Section IV(ii), *supra*, at pp. 67-9.

(143) The *Pipe Line Act* of Alberta, *supra* n. 138, section 14; *cf.*, the *Pipe Lines Act* of Saskatchewan, *id.*, section 22; the *Gas Pipe Line Act* of Manitoba, *id.*, section 20.

(144) The *Oil and Gas Conservation Act*, R.S.A. 1970, c. 267, section 49.

(145) *Id.*

(146) *Id.*, sections 51-53.

(147) *Id.*, sections 54, 55.

(148) Part I, Section III(i) and (ii), *supra*, at pp. 56 *et seq.*

(149) The *Public Utilities Board Act*, R.S.A. 1970, c. 302 section 101.

(150) The *Oil and Gas Conservation Act*, *supra* n. 144, section 56.

(151) *See* Olisa, *Government Control of Oil and Gas Pipelines In Alberta*, 5 Alta. L. Rev. 226, at p. 230 (1967).

(152) For example, the *Pipe Line Act* of Alberta, *supra* n. 138, section 19; *cf.*, the *Pipe Lines Act* of Saskatchewan, *id.*, section 31.

(153) Olisa, *loc. cit.*, *supra* n. 151, at p. 231.

(154) R.S.C. 1970, c. N-6. The Act applies to pipelines connecting provinces or extending beyond the limits of a province. Section 2(b).

(155) *Id.*, section 26.

(156) *Id.*, section 38.

(157) *Id.*, section 44.

(158) *Id.*

(159) *Id.*, section 45.

(160) *Id.*, section 53.

(161) *Id.*, section 51.

(162) *Id.*, section 52.

(163) *Id.*, section 55.

(164) *Id.*, section 57.

(165) *Id.*, section 59.

(166) Part I, Section III(iv), *supra*, at pp. 63 *et seq.*

(167) For example, the *Pipe Line Act* of Alberta, *supra* n. 138, the *Pipe Lines Act* of Saskatchewan, *id.*; and the *National Energy Board Act*, *supra* n. 154, all apply to both oil and gas pipelines.

(168) The *Gas Utilities Act*, R.S.A. 1970, c. 158, section 6. "The Act contemplates regulation of the price at virtually any and every stage 'from the reservoir to the burner tip.'" Acorn, *Constitutional Law Problems in Canadian Oil and Gas Legislation, The Background*, 3 Alta. L. Rev. 267, at p. 381 (Petroleum Law Supplement, 1964).

(169) The *Public Utilities Companies Act*, R.S.S. 1965, c. 136, section 31.

(170) The *Energy Board Act*, R.S.O. 1970, c. 312, section 19(1).

(171) *See* generally, Saucier, *Legal Problems Involved in the Transmission, Distribution and Pricing of Natural Gas in Canada*, (1960) Can. Bar Papers 298.

(172) "Toll" is defined to include "any toll, rate, charge or allowance charged or made for the shipment, transportation, transmission, care, handling or delivery of hydrocarbons, or for storage or demurrage or the like", none of which includes "production". *Supra* n. 154, section 2.

(173) *Id.*, section 61.

(174) *Id.*, section 83. *See* also, *supra* n. 134.

CHAPTER IV

THE AUSTRALIAN SETTING

While the American and Canadian experiences have provided, and will probably continue to provide, valuable guides for Australian governments in regulating the petroleum and natural gas industry,[1] it must be emphasized that several fundamental differences between the three jurisdictions signal an immediate caution against the automatic adoption of North American precedents. These differences necessitate the modification and adaptation of certain of the solutions adopted in the United States of America and Canada to uniquely Australian requirements.[2] Furthermore, this general caution is equally as applicable to the regulation of oil and gas pipelines as it is to other aspects of the petroleum industry.

However, any implication that the practice to date in Australia has been to completely ignore special, local requirements must be clarified. Although several Australian governments commissioned advice from North American experts on the best methods to adopt in legislating with respect to the oil and gas industry,[3] they, and the Parliaments to which the legislation was submitted, were aware of certain factors which had influenced the advice tendered but which do not prevail in Australia. For example,

Dr. Charles R. Hetherington's report on the development of Victoria's petroleum resources[4] was not fully accepted by the State Government,[5] nor by members of the Opposition, in debate on the Victorian Pipelines Commission Bill, on the basis that Dr. Hetherington had not considered the situation "from the Australian point of view."[6] Indeed, in this instance, Victoria framed its own solution to the problems of regulating natural gas pipelines by establishing a government-owned Commission to construct and operate natural gas pipelines within the State, a procedure subsequently adopted in South Australia and by the Federal Parliament for interstate pipelines.[7]

But while the several governments and Parliaments were aware of the risks in blindly following precedents developed in different circumstances, it is submitted that their awareness extended, in some respects, only to the more obvious contrasts between the North American experiences and the Australian setting.

This failing has resulted in defects in the legislation by two means. First, certain features of the North American pipeline legislation that on first examination apparently are relevant to Australia have been included in the legislation without proper consideration.[8] Secondly, an inadequate appreciation of the problems that have plagued the pipeline industry in the United States has resulted in a failure to guard against the possible

occurrence of similar problems in Australia.(9) Although these two criticisms are really two aspects of a single underlying proposition - that much of the Australian pipeline legislation, in general, has been based on foreign precedents without a full appreciation of the ramifications of, and the reasons for, those precedents - they emphasize that there have been errors of both omission and commission.

The purpose of this Chapter, therefore, is two-fold - first, to isolate those features of the Australian setting which distinguish it from the American and Canadian positions and; secondly, to outline the particular problems that may require special legislative or regulatory treatment. The scheme adopted to this end is to describe generally the petroleum industry in Australia, to discuss the basic contrasts between the three jurisdictions and then to outline the particular problems and the policies adopted towards meeting these problems.

SECTION I

THE PETROLEUM INDUSTRY IN AUSTRALIA

(i) Historical Development:

The search for petroleum in Australia began with the drilling of the first exploratory bore for oil at Coorong in South Australia as early as 1892.(10) However, it

proceeded in "a rather desultory manner"(11) so that as recently as 1968, the country was still largely dependent on imported crude oil for its petroleum needs and there was no commercial production of natural gas.

There had, in the intervening years, been several brief periods of activity and some commercial production. In 1906, the town of Roma was lit by natural gas from a "field" which had been discovered accidentally in an artesian bore at nearby Hospital Hill in 1900, making this enterprise one of the earliest attempts in the world at commercial use of natural gas, but the flow failed after only 10 days. Other minor discoveries were made but there was no oil and gas "play" and no exploration industry.

The presence of petroleum in Australia had been known since the crew of H.M.S. Beagle discovered bitumen in Victoria River in the Northern Territory in 1839. The Roma gas discovery in 1900 confirmed the presence of natural gas and a small show of oil and gas in a well drilled at Lakes Entrance in Victoria in 1924 confirmed the presence of oil. But notwithstanding these, and other small discoveries, many experts maintained that Australia's geology was 'old' and, therefore, was not likely to contain significant amounts of oil or gas.

The discovery, in 1953, of free flowing oil at Rough Range in Western Australia by West Australian Petroleum Pty. Ltd., however, "confounded the critics".(12)

Although the discovery did not prove to be commercial, "it provided a much needed incentive to continue the search which resulted ultimately in commercial finds."(13) The development of the oil and gas exploration industry in Australia can be traced directly to this date.

With the introduction of the Petroleum Search Subsidy Scheme(14) by the Federal Government in 1957, the pace of activity accelerated and resulted in discoveries which led to the first significant commercial production of both natural gas, at Roma in 1961,(15) and of oil, from the Moonie field in 1964.(16) Other discoveries, now in commercial production, followed but, although some of these, such as the Mereenie, Palm Valley, Gidgealpa and Moomba gas discoveries have subsequently proven to be of major significance to the future development of a national gas trunkline grid,(17) they did not at the time of their respective discoveries precipitate the fever of excitement often associated with major, glamourous discoveries.

This role was left to the offshore play and particularly the joint venture arrangement formed in 1964 between B.H.P. Co. Ltd., through its subsidiary Hematite Petroleum Pty. Ltd., and Esso Exploration Australia Inc. In February, 1965, the partnership discovered the Barracouta oil and gas field, 16 miles off the Victorian coast, with Australia's first offshore well, and then proceeded with an "amazing series of drilling successes".(18) In

just four years it had 13 shows of oil and gas from 24 rank wildcats and had added Kingfish, Marlin and Halibut to Barracouta as commercial fields. Furthermore, one of these, the Kingfish field, ranked at the time of its discovery as one of only some 50 odd fields in the world with recoverable reserves in excess of a billion barrels of oil, although its recoverable reserves have since been downgraded slightly.(19)

By 1969, it appeared that the Australian oil and gas industry had come of age. In that year, three State capitals - Brisbane, Melbourne and Adelaide - received their first deliveries of natural gas and oil first flowed from the offshore discoveries in Bass Strait. By the end of 1971, Perth had been added to the list of cities supplied with natural gas. In 1972-73, indigenous crude oil supplied 67 per cent of Australian refinery input(20) and natural gas was estimated to have supplied 6.1 per cent of the country's primary energy needs.(21) It is predicted that this latter figure will rise to nearly 18 per cent by 1980.(22)

(ii) The Present Position:

However, the dramatic impact of these developments over such a short span of time should not be permitted to produce any atmosphere of complacency. The Australian oil and gas industry may have appeared to have

come of age in 1969 but the spectacular successes of the late 1960's have not continued and, indeed, reserves of crude oil are already declining.(23) While more recent discoveries off the north-west continental shelf have re-awakened interest in the Australian play, and extensions of the Mereenie and Palm Valley gas fields in central Australia have been encouraging, the fever of the late 1960's has gone. Only about 50 wells were drilled in Australia in 1973, compared with 134 in 1972 and 309 in the peak year of 1969.(24)

Although the activity of the late 1960's may not, in retrospect, have signalled the commencement of a sustained exploratory effort leading to present self-sufficiency in petroleum and the maintenance of a satisfactory production to reserves ratio, it did, however, introduce oil and gas pipelines to Australia. Prior to this period, there had been only a small number of products pipelines in Australia, associated with refinery operations and each constructed under the authority of separate Acts applicable to individual projects.(25) In 1964 the first trunk pipeline for the transportation of crude oil from the Moonie field to Brisbane came into service and from 1968 to 1971, the major pipelines bringing gas to Brisbane, Melbourne, Adelaide and Perth, and oil from the offshore fields in Bass Strait, were completed. At the time of the debate on the Federal *Pipeline Authority Act 1973* in the

Federal Parliament, predictions were being made of a national pipeline grid and at the time of writing, work is underway on the country's first interstate pipeline from the Gidgealpa-Moomba gas fields in South Australia to Sydney. To facilitate these developments, three government corporations have been formed[26] and the Parliaments of three States have enacted separate pipelines legislation[27] while a fourth has substantially revised its existing Petroleum Act to provide for the licensing of trunk pipelines.[28]

The period of the 1960's and early 1970's has thus witnessed not only the development of oil and gas pipelines as a fact but also the introduction in most States and at the Federal level of a whole new body of statutory law regulating the activities of these "underground arteries". Whatever may be the future of the exploration industry in Australia and its attempts to maintain a viable indigenous supply of petroleum, a number of pipelines are here to stay for at least the life of existing reserves. Their regulation and control can be expected to play a major role in the proper utilization of those reserves and any future reserves which are yet to be discovered, even if at a slower rate than that of the late 1960's.

SECTION II

BASIC CONTRASTS WITH THE U.S.A. AND CANADA

(i) The Infancy of the Industry:

One difference between the Australian petroleum industry, on the one hand, and the industry in both the United States and Canada, on the other hand, will already be apparent from the preceding discussion of the developments which have occurred to date. It is, simply, that the Australian industry is in its infancy. The American industry of course goes back to the nineteenth century[29] and the Canadian industry derives its modern development from the Leduc oil discovery in Alberta in 1947, although there had been earlier, less extensive developments in Ontario and at Turner Valley in Alberta. Both countries have established industries which have long since passed the point of proving their viability, although the energy crisis of 1973-74 has caused each to carefully reassess its future. The Australian production industry on the other hand is a mere five or so years old.

This difference has perhaps no inherent significance in the sense that all three countries are faced with the same problem of maintaining secure short-term supplies at acceptable price levels with longer term protection against premature exhaustion of their reserves.

The ways in which this same problem is managed, however, can be expected to differ in accordance with the particular circumstances of each country. Greater incentives are more likely to be needed in an environment where there is still considerable doubt as to its long-term potential than in an environment which has proven its oil or gas producing capacity. It should be added parenthetically, however, that the argument can be pushed to extremes by the oil industry for, ultimately, in the words of the Senate Select Committee Report on *Off-Shore Petroleum Resources*,(30) it is probably more the prospects of finding oil or gas, rather than any incentives to explore, which encourage industry in a particular area.(31)

(ii) Enabling versus Responding:

The difference in the age of the petroleum industries in each of the three countries is, however, significant in one important respect in relation to the regulation of oil and gas pipelines. In the United States, government regulation of both oil and gas pipelines really emerged as a response to demands for protection of independent producers and refiners and to the unsatisfactory situation which had arisen from the dominance of the petroleum industry by a small number of "majors".(32) In Canada, as discussed earlier,(33) the history of the pipeline industry has not been punctuated with episodes of

abuse to the extent that was prevalent in the United States and the legislation there, at least at the provincial level, was not originally enacted as a corrective measure. Nevertheless, the present legislation in that country of course operates in an environment in which there is a vast, established pipeline network and might, therefore, reasonably be expected to be aimed at the control of that existing industry rather than at its initial establishment.(34)

The Australian pipeline legislation, on the other hand, without exception, has been aimed at enabling the construction of pipelines to bring into production the reserves which had been discovered at the time of its enactment. Indeed, most of the Acts, although in general terms, were debated in the context of proposals for specific projects. This is not to suggest that the Canadian and American legislation is to be automatically disqualified from providing a valuable guide. It does, however, emphasize that one purpose of the legislation is probably significantly different, although the means adopted to achieve that purpose might very well be the same.

(iii) The Absence of Exports by Pipeline:

Another basic contrast between the Australian position and the Canadian experience emerges from a consideration of the Canadian *National Energy Board Act*(35). Although this legislation is aimed in part at the regulation

of interprovincial pipelines, it has another major role which is not applicable to the Australian setting and that is the control of exports from Canada by pipeline.[36] In this respect, the role of the Board is in part to regulate pipelines as an export mechanism and not merely as a form of transportation as such. Australia may become an exporter of petroleum, particularly natural gas,[37] but such exports will not be by pipeline, although of course the export flow will involve pipeline transportation to the point of export by tanker. The control of exports as such, and not the control of pipelines as a component in the flow of export trade, will be the critical function to be provided for by legislation. It may be that the two functions can be performed by the one body, as is the case in Canada with the National Energy Board (although it should be noted that the role of the National Energy Board in the control of exports has lately come under severe criticism[38]) but again, an appreciation of the different functions to be performed by any regulatory agency is fundamental to a constructive analysis of appropriate regulatory mechanisms.

(iv) The Intrastate Feature:

The next contrast between Australia, on the one hand, and Canada and the United States, on the other, is that the pattern of discoveries in Australia to date

suggests a predominantly intrastate delivery to markets of both oil and gas. All pipelines in service at the time of writing service intrastate markets as a result of the fact that all mainland States, except New South Wales, have established reserves of natural gas and all of these, except South Australia, have established oil reserves.

The significance of this distinction is that the primary regulatory jurisdiction over most pipelines in Australia can be expected to be State and not Federal as the Federal Parliament has jurisdiction only over "interstate trade and commerce".(39) The first interstate pipeline is presently under construction from Gidgealpa-Moomba to Sydney and at this stage it is reasonably to be expected that service of the New South Wales market with natural gas may well be the only major use of interstate pipelines in the Australian setting.(40) There are no real indications at this time that an interstate network of crude oil pipelines will emergy although in the days immediately following the Bass Strait discoveries there was some discussion of a crude oil pipeline linking these with New South Wales markets.

(v) One Field One Producer:

A related aspect of this contrast is that Australian oil and gas fields generally are held under lease or permit to one company or group of companies. There is

no freehold ownership of oil or gas in Australia and this has resulted in a production pattern significantly different from that in both the United States and Canada. Freehold ownership in the United States has resulted in fractional ownership of the exploitation rights to particular fields. In the major producing province of Alberta in Canada, there is little freehold ownership[41] but the township survey system has resulted in relatively small, adjacent areas being leased to different companies. This, in turn, means that the production from any one field, and hence the supply to a particular pipeline, is likely to involve many producers. In both those jurisdictions, these different reasons raise the risk of the same problem, namely, that of ensuring access to any pipeline to all producers. As reservoir configurations show no respect for surface boundaries of leases, the same problem might arise in Australia[42] but it is suggested that the risk is much smaller and may therefore require a different technique from that adopted particularly in the United States.

In a sense, this last contrast is another aspect of the different histories of the industries in the three jurisdictions as discussed earlier.[43] The Australian legislation has not been enacted as a response to particular abuses, nor are those abuses as likely to arise in the Australian setting.

(vi) The Acceptance of State Ownership: Undertaking versus Regulating:

The next major contrast between the three jurisdictions is the greater acceptance in Australia of state ownership of utilities and some other industries. This distinction was adverted to in the debates in the Victorian Parliament on the Victorian Pipelines Commission Bill[44] as one ground suggesting caution in accepting the recommendations of North American experts. Apart from the wider acceptance in principle, certain practical savings are made through the use of government-owned instrumentalities because of the workings of the Australian Loans Council and the preferential borrowing terms made available to governmental authorities.[45] This may of course be significant wherever any policy of ensuring minimum transportation costs is pursued.

It is not surprising therefore to find that two States opted for government-owned gas pipelines and that interstate pipelines will be constructed and operated by the Federal Pipeline Authority. The significance of the contrast in terms of discussing the regulation of oil and gas pipelines lies in the obvious difference between *regulating* an activity and *undertaking* that activity directly.

For example, the former Victorian Pipelines Commission was exempted in its operations from the provisions of the *Pipelines Act* of that State.[46] This procedure means of course that the Commission was both

operating pipelines and determining in accordance with the provisions of its own enabling statute, whether consciously or otherwise, the policy issues applicable to other pipelines under the general legislation. Again, there may be no objection to this result but an appreciation that this is what a government-owned authority is in fact doing is important.

It is submitted that these are the major contrasts between the Australian setting and the experiences of the United States and Canada which should be borne in mind in any comparative discussion of the regulation of oil and gas pipelines in the three jurisdictions. Other contrasts will become apparent from the subsequent discussion of particular aspects of the Australian legislation in the next two Chapters.

SECTION III

THE PROBLEMS

What then, in this setting, are some of the main issues with which it would be expected that the Australian pipeline legislation might deal?

(i) The Commitment of Reserves to Markets:

The first, and perhaps most basic, is control

of entry into the pipeline business, the phrase "control of entry" referring in this context to the question of which - and where - pipelines should be built rather than to the question of who should build them, the latter question being discussed separately below.[47] It is a basic feature of pipeline legislation in North American jurisdictions that entry into the pipeline business is controlled, usually by a mechanism such as the certificate of "public convenience and necessity".[48]

The reasons for regulation at this stage, it is submitted, are obvious and follow from the reasons why there should be any regulation of pipelines at all. A pipeline is an inflexible method of transportation for forms of energy which are critical to the functioning of modern economies. It is inflexible in the sense that it provides a permanent (for the life of available reserves) one-way connection between known reserves and a market and, therefore, largely dictates the use of the reserves upon which it draws. Furthermore, as the financing of pipeline construction is tied very closely to the extensiveness of available reserves, particularly in terms of amortization periods,[49] a decision to construct a particular pipeline in most instances will also be a decision to commit all of a particular reserve to the selected market or markets. Other reserves may be proven subsequently but then they will be dedicated to the previously selected

market or markets *de facto* by the existence of the pipeline or, alternatively, will raise the question again of selecting a market and constructing a pipeline to that market.

In earlier discussion on the initial stages involved in planning oil and gas pipelines,(50) it was pointed out that, in its simplest form, the question of building a particular pipeline arises by virtue of the fact that reserves exist at A and a market exists at B. As with most generalizations, this is an oversimplification. There may, of course, be markets at B *and* C or there may be reserves at places other than A which could also supply market B.

In the Australian context, the first scenario is less likely to involve any major difficulty by virtue of the fact that there is only a handful of large market areas due to the extraordinarily urbanized nature of the country's population distribution. There was never any doubt, for instance, that the Bass Strait reserves would be dedicated primarily to the Melbourne market or that the South Australian reserves would be dedicated primarily to the Adelaide market.

The second scenario, however, has already been played out in Australia. In the case of the Sydney market, there was a long history behind the ultimate decision to supply natural gas from South Australian reserves. Initially, it had been planned to construct a pipeline to

connect Sydney with the Bass Strait reserves but the negotiations failed.(51)

Both scenarios do, however, raise the fact that the construction of pipelines is affected with a public interest. The dedication of particular reserves of a finite resource to particular markets involves a decision which ought not to be left to the dictates of profit motivations alone.

It is submitted that this proposition is equally applicable to both oil and gas pipelines although there are different considerations to be taken into account in relation to each. In the case of natural gas pipelines, the decision to supply a particular market by pipeline not only involves the dedication of particular reserves to that market. It also involves a decision to replace other energy supplies in that market with natural gas. Some uses of natural gas are new uses in the sense that without a supply of natural gas in a particular location, the industry using gas would not be located there. Fertilizer plants may be an example.(52) The major use in the industrial, commercial and private sectors, however, involves displacing other energy forms, whether electricity or coal gas or perhaps even oil. In both Melbourne and Adelaide, for example, the advent of natural gas effectively put an end to gas manufacture from coal.

The significance of this factor is that,

consciously or unconsciously, the decision to use natural gas involves the establishment of priorities of use among available energy supplies, priorities which ought not to be set only on the basis of first use of the cheapest resource. The recent experience of the United States in coming to the realization that it now has to pay a price for the fact that natural gas has been too readily and too cheaply available is a graphic illustration.(53)

That the displacement aspect of any decision to supply natural gas is true of the Australian setting is illustrated by the fact that the share of Australian consumption of primary energy supplied by natural gas has risen from zero in 1967-68 to 6.1 per cent in 1972-73 and is predicted to reach 18 per cent in 1980-81.(54) Past displacement has been largely at the expense of the shares of consumption of coal and wood and in the future it is predicted that the increased use of gas will displace the present shares of total energy consumption occupied by coal, wood, petroleum products and hydro-electricity.(55)

The displacement issue is not so true, in the Australian setting, of any decision to tap supplies of indigenous crude oil reserves. There is an already established demand for crude oil in Australia which, until the late 1960's, had been almost exclusively supplied by imports. The decision to supply indigenous crude oil to domestic markets is, therefore, essentially a decision to

substitute local supplies for imported supplies and not, as in the case of natural gas, a decision to substitute one form of energy for another. In view of the rapidly escalating costs of oil from Australia's major suppliers and the insecurity of supply from the politically volatile Middle Eastern countries, it is assumed that domestic sources of supply are desirable.

It should also be noted in this respect that indigenous crude oil supplied only 67 per cent of total refinery input in 1972-73[56] and that this proportion is expected to decline from 1974 onwards.[57] Thus, the question in relation to crude oil is one of maximizing the proportion of an existing demand which is to be supplied from domestic sources and not one of establishing priorities of use for domestic oil *vis-a-vis* other forms of primary energy.

There is nevertheless a public interest involved in any decision to construct an oil pipeline by virtue of the fact that that decision will effectively dictate the centres in which major refining complexes are to be located. It will not dictate the location of the major consumption of petroleum products as the products will be shipped by other means from refining centres to the areas of demand whereas in the case of natural gas, because of the continuous flow through pipelines to the point of consumption,[58] the termination point of any particular pipeline effectively

dictates the end use of the gas which it is supplying.

(ii) Decentralization:

Another factor relevant to the control of entry into the natural gas pipeline business is the potential for supply of intermediate markets. Unlike crude oil which must be refined into petroleum products before use, natural gas is produced in a basically usable form and what processing must be done is usually done at a field plant at or near the well-head or at the earliest opportunity after bringing the gas ashore in the case of offshore production.(59) Natural gas trunk pipelines can thus be tapped at intermediate points along their course and may have spur lines to serve markets some distance from their main right-of-way. Entry into the gas pipeline business may, therefore, not only introduce the supply of natural gas to major markets at the end of the pipeline but may also provide supplies to numerous intermediate markets with the consequence that those markets may not only be provided with a supply of part of their basic energy demands but may also be able to expand and develop through the attraction of industry.

This factor figured prominently in many of the Parliamentary Debates on the Australian pipeline legislation because of the perennial concern of Australian governments with decentralization.(60) Natural gas pipelines

were seen by many as having tremendous potential to encourage this objective.

The public interest aspect of this feature of controlling entry into the natural gas pipeline business arises by virtue of the fact that the shortest, and therefore, *prima facie*, cheapest route[61] between reserves and major markets may not fit with wider political objectives. Route selection, in a broader sense than merely avoiding potential hazards and saving on construction costs, is therefore a major public interest aspect of natural gas pipelines.

To summarize the discussion to this point, it is submitted that entry into the oil and gas pipeline business should be controlled and that the methods of control should be a primary concern of any pipeline legislation. In the case of natural gas pipelines, entry should be controlled because any decision to construct a particular pipeline amounts to a decision to dedicate particular reserves to a particular market and to displace other forms of energy in that market. It may also involve a decision to alter growth and development patterns by selecting a particular route so that intermediate markets may be served. In the case of crude oil pipelines any decision to construct a particular pipeline amounts to a decision to dedicate particular reserves, although not necessarily to a particular market as the location of crude oil

pipelines does not generally dictate the point of consumption of petroleum products. It will, however, dictate the location of refining complexes and, potentially, the location or expansion of petrochemical industries. It is submitted that these considerations establish the basic need for regulatory control as well as point towards the main issues with which that control should be concerned.

There are, however, other issues with which pipeline legislation should deal.

(iii) Who should build Pipelines:

The first of these is an aspect of controlling entry into the pipeline business and is the question of who should build pipelines. As was discussed in the previous Chapter,[62] the ownership of pipelines in North America by producing, refining or marketing companies has, rightly or wrongly, been central to the dispute surrounding pipeline regulation. In relation to oil pipelines, this dispute has produced a marathon debate on the issue of divorcement which is still unresolved. There has been less controversy surrounding this aspect of the regulation of gas pipelines but the question should still be examined. Again, it is convenient to divide the discussion as it relates to gas or oil pipelines.

In relation to gas pipelines, some of the issues are perhaps focussed by the following extracts from the

Hetherington Report on *The Orderly Development of Petroleum in Victoria.*[63] Dr. Hetherington wrote:[64]

> In North America most long distance gas trunk pipelining is done by third parties although the distributor or producer or both may have interests in the third party. It is believed that it would be undesirable in Victoria for the producer to control gas trunk pipelines for the same reasons expressed above with respect to control of markets. In contrast, third party ownership would permit freedom from discrimination in purchases and sales, capital requirements of the gas distributors would be reduced and transportation costs could be separated from reticulation costs. For the short and relatively inexpensive pipeline involved from the Gippsland Shelf Field to Melbourne... it might be considered that the Gas and Fuel Corporation could do this job as well as anyone. Under such an arrangement the Gas and Fuel Corporation which is the principal gas distributor in the State would also be essentially the only purchaser of gas within the State.
>
> In order to encourage exploration a producer must have some assurance or at least prospects for marketing any gas discovered on a profitable basis and it is believed that it would be discouraging to exploitation to limit prospective purchasers of gas for use in the State to a single Government corporation that is also the principal gas distributor.
>
> * * *
>
> Since there are no gas trunk pipelines in Victoria the unique opportunity exists to establish a gas transportation authority which could give the lowest possible transportation costs while leaving the actual purchase and sale of gas to free competition. As an alternative to a purely third party or

> the Gas and Fuel Corporation handling trunk pipelines, consideration should be given to a Government sponsored private company for trunk pipelining somewhat along the lines of the Alberta Gas Trunk Line Company in Alberta.
>
> * * *
>
> If this route is not taken it is suggested that it would be preferable to have third party ownership of the trunk pipeline principally so that natural gas producers will not necessarily be limited to a single purchaser that is also the principal distributor.

In relation to the control of gas markets, he wrote:(65)

> The producer could control the market by pricing gas to the distributing companies at levels which would preclude lower priced industrial sales and by having control of trunk pipelines and direct sales off trunk pipelines, authorising only such sales to lower priced industrial markets as would limit total sales to the available supply.
>
> * * *
>
> The producer's normal and rightful business objective is to market its product at maximum profit and a producer having control of industrial markets would be in a position to limit sales or otherwise select sales to maximize profit not necessarily in the public interest. To place the control of sales to industry in the hands of a producer who is also interested or could become interested in the refining of oil could limit fuel competition. It is not believed that it would be in the public interest for a single producer or a group of producers to control the gas market within the State.

At this point, it is sufficient to observe that the question of who is to build natural gas pipelines is a major policy issue. No general answer is attempted as, it is submitted that, as Dr. Hetherington's remarks themselves indicate, each individual market and producing situation needs to be considered. If the gas distribution system is basically a government-owned enterprise, that fact of itself may provide adequate control in the public interest. If, as was done in South Australia, a government-owned trunk pipeline authority is selected for other reasons, such as the cheaper financing available to such an authority,(66) then, again, control may be provided through that mechanism itself. The important observation at this stage is that the control of gas trunk lines by particular interests may be contrary to the public interest and, therefore, is a question which should be faced in pipeline legislation, or for the solution of which an appropriate mechanism should be provided.

The same issue arises in relation to crude oil pipelines, although in this case, it should be noted at the outset that there is not the same connection between the control of oil pipelines and the marketing of petroleum products as there is between the control of gas pipelines and the marketing of gas. Oil must go through the intermediate stage of refining and crude oil pipelines are, therefore, in a sense, merely a means of moving the oil

to the site of the refinery rather than the means by which the oil is moved directly into markets.

Nevertheless, the question of control is an important one as witnessed by the long history of alleged abuses in the United States, attributed largely to refinery ownership of crude oil pipelines.(67) Indeed, that history would suggest that the control *per se* of oil pipelines is a more important question than the control *per se* of gas pipelines. In relation to gas, the major public interest issue is the control of markets and pricing, whether that interest be protected by the device of controlling pipelines or by some other mechanism, such as field price regulation or public utility regulation of gas distribution companies. Yet the only reference in the Hetherington Report, with respect to the control of oil pipelines, was in the following terms:(68)

> Oil pipelines usually transport crude oil or products from a field or plant to a refinery and rate regulation does not have the same significance as in the case of gas, particularly with respect to protecting the public. It is believed that only a minimum of rate regulation of oil pipelines is needed consisting of the requirement to post tariffs and the right of the Minister of Fuel and Power or of an interested party to ask for a review of rates as to reasonableness and freedom from discrimination.

But not even this rather mild form of control has been adopted in any of the Australian legislation.

(iv) Control of Pipeline Charges:

The next main policy issue is that of the basis on which pipelines, whether oil or gas, should charge for transportation. It is generally assumed that pipeline transportation should be at cost plus a reasonable rate of return on investment and, it is submitted, that this is a proper approach to the question. In the case of non-government-owned pipelines, the justification for this public utility regulatory approach is found in the fact that pipelines generally speaking are monopolies, a fact which is itself justified, subject to proper regulatory controls against abuses of the monopolistic position, by the need to avoid expensive duplication of facilities. This observation is probably equally applicable to both oil and gas pipelines, although again for different reasons.

Gas pipelines will themselves be monopolies in all likelihood[69] and, if they do not operate reticulation systems to which they are selling or for which they are transporting, those reticulation systems themselves will be monopolistic utilities.

Oil pipelines will themselves be monopolies over particular routes but in the markets which the end products supply after refining there should be free competition. This competition can be expected to dictate reasonable transportation costs, at least for any refinery which has an interest in the pipeline and must compete with its

products in the market place. However, where the pipeline is carrying crude oil to competitors' refineries (a situation which might be expected to arise as a result of the desire to avoid expensive duplication of facilities) there are the risks that discriminatory rates may be set and that the pipeline will itself be used as a tool to compete unfairly. Where the pipeline is independently owned, pipeline tariffs may limit the ability of those refineries which are dependent for their supplies of feedstock on that pipeline to compete in the market place with others not dependent on the pipeline.

It is submitted that in all cases oil pipelines ought to carry oil at cost plus a reasonable return on investment. Even in the case where effective market competition restricts an integrated company to reasonable price levels for its end products, the company ought not to be permitted to reap any unreasonable return by attributing profits to its pipeline operations. It is submitted that such profits, as profits derived from the exploitation of a publicly owned resource, ought to flow primarily to the public. This is not to say that the need for a high return on a high risk investment should not be recognized. The proposition is simply that the operation of oil pipelines is not the mechanism through which that return should be realised. It is submitted that the appropriate points are at the production stage, through such

mechanisms as low royalties or depletion allowances, or at the marketing stage through higher consumer prices.

However, where pipelines are government-owned, there may be some justification for departing from the general proposition of transportation at cost plus a reasonable rate of return. In this case, the pipeline itself may be used as the funnel through which public revenues are generated, a point which was recognized in the Parliamentary Debates on the establishment of both the Victorian Pipelines Commission[70] and the South Australian Natural Gas Pipelines Authority.[71] In both cases the possibility of the respective authorities returning significant revenues to the Consolidated Revenue was recognized although there was no apparent consideration given to the desirability of such a course, probably because the major concern at the time of the respective debates was with ensuring deliverability in the market place at the lowest possible price.

It is submitted that in all cases the transportation by pipeline of both oil and gas should be at cost plus a reasonable return on investment. The reasons in relation to privately owned pipelines have been discussed.[72] In relation to government-owned pipelines, it is submitted that the transportation component of the oil or gas industry is not the appropriate stage at which to maximize government return as this would tend to confuse the cost, or

profitability, of a service with the return to be derived from exploitation of a public resource. The only qualification that might be added in relation to government-owned gas pipelines is that they might be permitted to earn a return, over and above cost plus a reasonable return, sufficient to finance the extension of services in pursuance of a policy of decentralization and to subsidize unprofitable deliveries which may be justified on wider grounds.

(v) Competitive Abuses:

Related to the issue of the control of entry into the pipeline business and the question of who is to build pipelines are the alleged abuses discussed in detail in Chapter III[73] and which, for convenience, are styled "competitive abuses". The risks of the American history repeating itself in Australia may be relatively small for a number of reasons. First, the fact that these abuses have not been apparent in Canada[74] would suggest that they may be a peculiarly American phenomenon attributable to the early history of the petroluem industry in that country. Secondly, the fact that Australian pipelines have been regulated to some extent since their advent, rather than as a consequence of their advent, as already noted earlier,[75] may be sufficient of itself to deter such practices. Thirdly, the differences in the Australian setting already noted,[76] may make it less likely

that the types of abuses which have been alleged in the United States will arise in Australia. Nevertheless, the American history has shown that the risk is there and it is suggested that it is better to avoid its consequences than to have to deal with those consequences after the event. Indeed, this assumption seems to have underlain the Australian Parliamentary Debates on common carrier provisions, discussed in detail in Chapter VII. But, as will be submitted then, there is little indication that the legislators really appreciated the nature of the problem with which they thought they were dealing adequately.(77)

(vi) Pollution Control and Safety:

Both oil and gas pipelines are potential polluters in the event of a break and gas lines particularly may also be dangerous. Specification of standards of construction and operation is therefore a matter with which it is to be expected that pipeline legislation will deal.

(vii) Expropriation:

Finally, pipelines need to cross the property of others and there, therefore, needs to be legislative provision for the method by which property is to be acquired for this purpose and with respect to the responsibility of pipeline companies to those over whose property they

have rights-of-way. As discussed in Chapter III,[78] it was this need for the invocation of the power of eminent domain that was used in some cases in early American legislation as justification for the regulation of other aspects of pipeline operation.

SECTION IV

THE POLICY

As a general proposition, it would appear that the Australian legislators addressed themselves to only some of the foregoing problems and, even then, did not deal with those aspects of the problems which have just been discussed. There is perhaps an obvious explanation and that is that in all cases the pipeline legislation was framed and enacted in the context of proposals for specific pipeline projects by specific operators. Although couched in general terms, its policy implications were not discussed in such terms. Most criticism in the debates was directed towards aspects of the specific proposals.

The control of entry into the pipeline business in the terms discussed above[79] was not the subject of any declared policy on the parts of any of the governments. Indeed, the underlying assumption in all cases appears to have been that there should be immediate exploitation of

both oil and gas reserves and, in the case of gas, at the lowest possible price to consumers. While immediate exploitation of oil reserves might be justified on the ground of reducing dependence on imported oil, it is submitted that the question should not have been passed over so lightly in relation to natural gas. One result of expanding supplies of gas at low prices may be to encourage wasteful and undesirable uses of that energy source at the expense of prematurely exhausting supplies for other uses to which it is better suited economically and environmentally.

The pipeline legislation, as is discussed in the next Chapter,(80) does deal with the issue of entry into the pipeline business through the licensing requirements. However, it does not require any meaningful consideration at the time a licence is issued of the matters discussed above. There is nowhere a requirement for anything as general as a certificate of public convenience and necessity.

In the case of the government-owned pipelines, the control of entry into the pipeline business is perhaps not as important an issue in terms of requiring legislative definition. The issue, in the literal sense of the words, "the control of entry", is foreclosed by the mere establishment of the particular authority. However, the authority once established should be concerned with matters of

conservation and end-use and, therefore, some statutory directive or guideline to this end might be expected.

In summary, there does not appear to be any government policy on the control of entry into the pipeline business except to the extent that the mere fact of licensing requirements indicates a policy of control and except to the extent that the mere creation of government-owned pipelines forecloses the question in its literal sense.

Similarly, the question of who is to build pipelines was subject to no clear policy and was the cause of very little debate on the aspects of the issue discussed above.(81) There was some reference in the debates on the Victorian Pipelines Commission Bill to general agreement that the producing companies should not operate gas trunk pipelines(82) but there was no debate at all on the question in relation to oil pipelines. Again, it should be noted, the question is foreclosed where a decision is taken to establish government-owned pipelines. But even in these cases the decisions were influenced by the ability of government instrumentalities to raise the large capital involved on more favourable terms than private enterprise, rather than by any policy based on an examination of the issues referred to.

This leads to a consideration of the policy of the governments with respect to the question discussed in

the previous Section of the financial basis on which pipelines should carry oil or gas.(83) As already mentioned, the underlying assumption of the governments on this question, at least with respect to gas, was that transmission should be at cost, although the possibility of the government-owned pipelines eventually generating profits which might be used as a source of general revenues was recognized.(84) There is no identifiable policy on this question as related to oil pipelines.

It is perhaps interesting to digress for a moment to consider the extent of the savings in transmission costs which may be effected through the mechanism of a government-owned pipeline in the Australian setting. In its submission to the Federal Government on financial aid for the construction of a natural gas pipeline from the Gidgealpa-Moomba fields to Adelaide, the Government of South Australia was able to demonstrate that the computed unit cost of transportation for a commercially financed and operated pipeline would be about 45 per cent higher than if funds were provided at the then prevailing rates for government borrowing.(85) In view of the fact that the costs of servicing the requisite capital moneys were calculated to constitute approximately 90 per cent of all costs,(86) the Government submitted that for each additional one per cent per annum required in debt service to cover interest and depreciation, the cost of transportation

would increase by nearly one cent per thousand cubic feet of gas.(87) These estimates, of course, would be true only of that particular pipeline as unit costs do not necessarily increase or decrease in direct relationship to the distance travelled by a pipeline and also as unit costs would vary according to the diameter of the pipe used which is partly a function of the size of available reserves and markets. They do, however, quite dramatically demonstrate the savings which are available in the Australian setting because of the borrowing position of governments and government instrumentalities.(88)

The three remaining policy issues discussed above(89) - prevention of competitive abuses, the regulation of safety and pollution aspects of pipeline operation and the expropriation of rights-of-way - are matters on which there does appear to have been some government policy. However, in a sense, they are "motherhood" issues and, thus, no detailed statement of that policy was made. In relation to the prevention of competitive abuses, the legislation and the debates were restricted to common carrier provisions and these are discussed separately in Chapter VII.(90) The legislation deals in some detail with safety and pollution problems and, again, these are discussed separately(91) as are the compulsory acquisition provisions,(92) although it might be noted in relation to this last that some concern was expressed in the debates

about the principle of private companies having powers of expropriation.[93]

FOOTNOTES - CHAPTER IV

(1) *See* Chapter III, *supra*, at pp. 39-41.

(2) Dr. A.R. Thompson has phrased the caution in the following terms: "The purpose of this paper is to describe the salient features of petroleum legislation in Canada so as to facilitate this comparative study. Especially will this purpose be achieved if the exposure of contrasts between the Australian and Canadian situations inhibits the temptation to make superficial generalisations about what ought to be done in Australia based on what is done in Canada." *Australian Petroleum Legislation and the Canadian Experience*, 6 Melb. U. L. Rev. 370 (1968).

(3) *Supra* n. 1.

(4) Hetherington, *The Orderly Development of Petroleum in Victoria*, a Report to the Premier of Victoria, March, 1966.

(5) *Per* Sir Henry Bolte, Premier, Victorian Parliamentary Debates, House of Assembly (hereinafter abbreviated as V.P.D., H.A.), November 16, 1966, at p. 1824.

(6) *Per* the Hon. A.W. Knight, Victorian Parliamentary Debates, Legislative Council (hereinafter abbreviated as V.P.D., L.C.), November 29, 1966 at p. 2231. *See* also the comments of the Hon. I.R. Cathie, *id.*, at pp. 2234-5.

(7) *See* Chapter VI, *infra*, at pp. 187 *et seq.*

(8) The inclusion of common carrier provisions, at least in the form they have taken in some of the Acts and without supporting common purchaser provisions, is an example. *See* further, Chapter VII, *infra*, at pp. 234 *et seq.*

(9) An example is that the State Acts regulating crude oil pipelines do not contain provisions for regulation of rates, or even for the filing of tariffs.

(10) The Petroleum Information Bureau (Australia), *Oil and Australia - The Figures Behind the Facts 1972*, at p. 43. The history of petroleum search in Australia is chronicled, *id.*, and is further described

in *Off-Shore Petroleum Resources*, the Report of the Senate Select Committee on Off-Shore Petroleum Resources, 1971, at pp. 51 *et seq*. (hereinafter cited as the Senate Report).

(11) The Senate Report, *supra* n. 10, at p. 51.

(12) *Id.*

(13) *Id.*

(14) The history and features of the scheme are discussed in the Senate Report, *supra* n. 10, at pp. 60 *et seq*.

(15) The Roma gas field was initially "rediscovered" in 1954 and was proven to be commercial in 1960.

(16) The Moonie oil field was discovered in 1961.

(17) The concept of a national gas trunkline grid was introduced in the course of the Parliamentary Debates on the establishment of the Federal Pipelines Authority. On the role of the Authority, *see* Chapter VI, Section III, *infra*, at pp. 209 *et seq*.

(18) *The Oil and Gas Journal*, April, 1969, at p. 29.

(19) The latest available figure for initial recoverable reserves from this field is 952 million barrels, The Petroleum Information Bureau (Australia), *Oil and Australia - The Figures Behind the Facts 1973*, at p. 45.

(20) *Id.*, at p. 6.

(21) *Id.*, at p. 30.

(22) *Id.*

(23) One prediction is that, without further discoveries, Australia will be producing only 40 per cent of its oil requirements in 5 years time and, by 1980, less than a quarter. *See* the remarks of Mr. Kerin, Parliamentary Debates of the Commonwealth, House of Representatives, May 16, 1973, at p. 2190.

(24) *The Oil Daily*, June 3, 1974, at p. 8.

(25) *See* the remarks of Sir Henry Bolte, Premier of Victoria, in debate on the *Pipelines Bill*, V.P.D., H.A. February 14, 1966, at pp. 2966-7.

(26) The Victorian Pipelines Commission, the responsibilities of which have since been assumed by the government-owned Gas and Fuel Corporation of Victoria, the Natural Gas Pipelines Authority of South Australia and the Federal Pipelines Authority. *See* further, Chapter VI, *infra*, at pp. 187 *et seq*.

(27) The *Pipelines Act 1967*, Act No. 7541 of 1967 of Victoria; the *Pipelines Act, 1967*, Act No. 90 of 1967 of New South Wales; the *Petroleum Pipelines Act, 1969*, Act No. 112 of 1969 of Western Australia. *See* further, Chapter V, *infra*, at pp. 145 *et seq*.

(28) The *Mining (Petroleum) Act, 1940-1958*, Act No. 58 of 1940 of South Australia, as amended by the *Mining (Petroleum) Act Amendment Act, 1967*, Act No. 75 of 1967. *See* further, Chapter V, *infra*, at pp. 145 *et seq*.

(29) Chapter III, Part I, Section I, *supra*, at pp. 41 *et seq*.

(30) *Supra* n. 10.

(31) The Senate Report, *supra* n. 10, states, at p. 59: "A wide variety of policies may be used by Government to encourage petroleum exploration by private enterprise. Many of these are used in varying degrees in Australia. Such policies find expression in the incentives that governments provide to encourage oil exploration. But it is not to be thought that such policies are the only inducements to oil companies. The attractiveness of the geology in the area may be the prime incentive. If the prospects of finding large quantities of oil are good, companies will explore almost regardless of the policies pursued by the host government.

In areas like the Middle East with unstable politics and with governments seeking ever larger shares of the financial returns from oil production, because of the unique geological conditions offering large reservoirs of inexpensive produceable oil there is great competition to gain oil concessions.

In areas like the North Sea, the prime attraction is nearness to the huge markets of Western Europe where higher cost oil and gas can find a ready market."

(32) *See* Chapter III, Part I, Section II, *supra*, at pp. 45-6.

(33) Chapter III, Part II, *supra*, at pp. 72-6, 82.

(34) It should be noted, however, that the federal Canadian legislation, the *National Energy Board Act*, R.S.C. 1970, c. N-6, was enacted partly as a response to a particular situation which was seen at the time to have potential for future abuse, *viz.*, the control of exports.

(35) *Supra* n. 34.

(36) *Id.*, Part VI.

(37) *See* further, Chapter VI, *infra*, at pp. 217-9.

(38) For example, McDougall, *The Canadian National Energy Board: Economic Jurisprudence in the National Interest or Symbolic Reassurance?*, 11 Alta. L. Rev. 327 (1973).

(39) *The Australian Constitution*, section 51(i).

(40) Despite predictions of a national pipeline grid, it was reported as recently as June, 1974, that "thus far, plans for a national pipeline grid across the country have not gone much further than the talking stage". *The Oil and Gas Journal*, June 10, 1974, at p. 106.

(41) The Crown holds approximately 81 per cent of the mineral rights. *See* the Canadian Tax Foundation, *Oil and Gas Production and Taxes*, at p. 98 (1963).

(42) The fact that the various Australian Acts contain provisions similar to common carrier provisions indicates that the problem was contemplated. *See* further, Chapter VII, *infra*, at pp. 234 *et seq.*

(43) *Supra*, at pp. 107-8.

(44) *See* further, Chapter VI, *infra*, at p. 227, n. 53.

(45) The savings are discussed in more detail, *infra*, at pp. 135-6.

(46) The *Pipelines Act 1967*, *supra* n. 27, section 4(2).

(47) *Infra*, at pp. 122 *et seq.*

(48) Chapter III, Part I, Section IV, *supra*, at pp. 68-70 and Part II, *supra*, at pp. 77, 80.

(49) *See* Chapter II, Section II(iii), *supra*, at pp. 28-9.

(50) Chapter II, Section I(i), *supra*, at pp. 8-9.

(51) *Id.*, at p. 9.

(52) *See* further the discussion in Chapter II, Section I(i), *supra*, at p. 12, on the circumstances in which markets are sometimes "created".

(53) *See* the discussion in Chapter III, Part I, Section IV(ii), *supra*, at p. 71.

(54) The Petroleum Information Bureau (Australia), *loc. cit.*, *supra* n. 19, at p. 30.

(55) *Id.*

(56) *Supra* n. 20.

(57) *Supra* n. 23.

(58) *See* the discussion on the operation of gas pipelines, Chapter II, Section II(iii), *supra*, at pp. 25-8.

(59) *Id.*

(60) *See*, for example, V.P.D., H.A., November 16, 1966, at pp. 1822-3; V.P.D., L.C., November 29, 1966, at pp. 2024-5, 2239, 2256, 2258.

(61) *See* further, Chapter II, Section I(i), *supra*, at p. 14.

(62) Chapter III, Part I, Section II, *supra*, at pp. 45 *et seq.*

(63) *Loc. cit.*, *supra* n. 4.

(64) *Id.*, at p. 6-5.

(65) *Id.*, at p. 6-4.

(66) *See* further, *infra*, at pp. 135-6.

(67) *See supra* n. 62.

(68) *Loc. cit.*, *supra* n. 4, at p. 6-8.

(69) *See* further Chapter III, Section IV(ii), *supra*, at p. 69.

(70) For example, *per* P.V. Feltham, V.P.D., L.C., November 29, 1966, at p. 2260: "[The Bill] makes careful provision for the authority of accounts but it does not state whether the Commission is to make money or where that money is to go. I have no doubt as to what will happen. Whether it be the Gas and Fuel Corporation or the Commission a lot of money will go into Consolidated Revenue." *See* further, Chapter VI, Section II, *infra*, at pp. 208-9.

(71) For example, *per* the Hon. Frank Walsh, Premier, Parliamentary Debates of South Australia, House of Assembly, February 28, 1967, at p. 3279: "Subclauses (3) and (4) [of Section 15] are enabling provisions arising from the possible nature of conveyance charges yet to be finally negotiated. . . . The supply and price agreements with the main consumer and the conveyance charges may be determined on such a basis that the pipeline authority makes its charges to the producers broadly on the basis of what a commercially financed pipeline would require. In such an event subclauses (3) and (4) would be required to authorize that the appropriate margins be appropriately passed back to the public utilities." *See* further, Chapter VI, Section I, *infra*, at pp. 192, 201-3.

(72) *Supra*, at pp. 128-9.

(73) Chapter III, Section II, *supra*, at pp. 45 *et seq*.

(74) *See* the comments in Chapter III, Part II, *supra*, at p. 82.

(75) *Supra*, at pp. 108-9.

(76) *Supra*, at pp. 107 *et seq*.

(77) Chapter VII, *infra*, at pp. 234 *et seq*.

(78) Chapter III, Part I, Section III(i), *supra*, at pp. 56-8.

(79) *Supra*, at pp. 114 *et seq*.

(80) Chapter V, Sections II and III, *infra*, at pp. 153 *et seq*.

(81) *Supra*, at pp.122 *et seq*.

(82) For example, *per* Mr. Stoneham, Leader of the Opposion, V.P.D., H.A., November 16, 1966, at p. 1808:

"No one suggests that the producers should control the pipeline."

(83) *Supra*, at pp. 127 *et seq.*

(84) *Supra*, at p. 129.

(85) Parliamentary Paper No. 102 (South Australia), *Finance for a Natural Gas Pipeline in South Australia* (1966), at p. 7.

(86) *Id.*, at p. 5.

(87) *Id.*, at p. 6.

(88) These savings may, however, provide only a superficial advantage. Limitations on the overall availability of borrowing funds may mean that financing of pipeline construction through this means will involve the diversion of funds from other government projects such as roads, schools, etc.

(89) *Supra*, at p. 130.

(90) Chapter VII, *infra*, at pp. 234 *et seq.*

(91) Chapter V, Section V, *infra*, at pp. 170 *et seq.*

(92) *Id.*, Section IV, *infra*, at pp. 168 *et seq.*

(93) For example, *per* Mr. B.J. Evans, V.P.D., H.A., March 2, 1967, at pp. 3265-6: "I am not aware of any precedent for granting such powers to private enterprise in relation to an installation connected with profit-making. I am doubtful whether the provisions of the Lands Compensation Act as they are applied at present for what one may term the public good should also apply to private enterprise for profit-making purposes. In the event of compulsory acquisitions of land for the benefit of private industry the question of the extra percentage to be allowed for such acquisition should be examined. It is a doubtful proposition to link the profit-making activity of a private company with what is normally regarded as an action taken in the public interest."

CHAPTER V

THE AUSTRALIAN LEGISLATION

The purpose of this Chapter is to analyse the provisions of the Australian State pipeline legislation with a view to assessing its effectiveness in dealing with the issues discussed in the previous Chapter.(1) The Chapter does not contain an exhaustive analysis of all the provisions of all the Acts but is directed primarily towards the legislative treatment of those particular policy issues.

The legislation establishing the government-owned pipelines is considered separately in Chapter VI.(2) The main justification for drawing this particular dividing line is that at least some of the major policy issues in relation to pipelines are determined by the decision to establish a government-owned pipeline itself rather than by the operation of the legislation.(3) It should be noted, however, that the same issues are involved in each case. It is simply that they arise for decision at different points in the scheme of things, or the decisions are made through different instrumentalities. Thus, several of the comments that will be made in relation to the general pipeline legislation might have equal validity in relation to any decision to establish a government-owned

pipeline authority or in relation to decisions taken by that authority once established.

Three States have enacted separate pipelines legislation[4] while two others have quite detailed provisions dealing with oil and gas pipelines in their general petroleum legislation.[5]

SECTION I

APPLICATION OF THE ACTS

(i) Restriction to Oil and Gas Pipelines versus Solids Pipelines:

The Acts of both Victoria and New South Wales, it must be noted at the outset, apply to pipelines for the conveyance of any substance and not just to oil and gas pipelines.[6] That this was the intention of the respective Governments is apparent from the Parliamentary Debates[7] and also, indeed, from certain specific references in both Acts to the carriage of "hydrocarbons" or "petroleum" in a context which clearly indicates that pipelines for the conveyance of these substances are merely particular types of pipelines subject to the Acts.[8]

A number of observations should be made on this feature of these two Acts, all of which flow from the view which seems to have been adopted that pipelines are

"simply another form of transportation."(9) It will be apparent from the discussion, in the previous Chapter,(10) on the major issues with which oil and gas pipeline legislation should deal, that most, if not all, of these issues are peculiar to oil and gas pipelines. This is not to say, of course, that they must necessarily be dealt with in separate pipeline legislation but it does mean that oil and gas pipelines ought to be subjected to certain regulatory procedures which might not be appropriately applied to other forms of pipeline transportation.

It is submitted that there are three alternative approaches which might be taken in determining the limits of the application of pipeline legislation. The first is to enact general pipeline legislation, applicable to all pipelines, which would be aimed primarily at the coordination of pipeline routes, safety and pollution aspects of pipeline operation and the procedures to be followed in the necessary acquisition of pipeline easements. Those features of the construction and operation of oil and gas pipelines which have been discussed in the specific context of oil and gas and requiring legislative control should then be dealt with in other oil and gas legislation.

A second approach might be to provide for separate legislative treatment of oil and gas pipelines in terms of the licensing of such pipelines but with some of the aspects of the peculiar features being dealt with

separately or in other oil and gas legislation. An example of this approach is perhaps found in the Alberta legislation where the *Pipe Line Act*[11] deals with the basic construction and operation of pipelines but other aspects of the regulatory control of pipelines are found in other legislation. For example, the *Oil and Gas Conservation Act*[12] contains provisions relating to common carriers, common purchasers and common processors,[13] the *Gas Utilities Act*[14] contains provisions dealing with gas distribution within the Province, and the *Gas Resources Preservation Act*[15] regulates exports by pipeline from the Province. It should also be noted that the elaborate conservation provisions contained in the *Oil and Gas Conservation Act*, particularly those relating to allowable production rates,[16] also have some bearing on the question discussed above in relation to the commitment of oil and gas resources to particular markets.[17]

The third suggested approach is to attempt to deal with all of the issues discussed earlier in the one piece of legislation. The *National Energy Board Act* of Canada[18] is perhaps an example of an attempt at this approach in that it controls entry into the pipeline business on criteria relevant to the dedication of particular reserves to particular markets[19]; deals with who should build pipelines[20]; provides for the regulation of tariffs for transmission by pipeline[21]; deals

with the acquisition of easements[22]; provides for the regulation of the safety and pollution aspects of pipeline operation[23]; and, finally, contains provisions to deal with what have been termed "competitive abuses".[24]

The Victorian and New South Wales Acts are not easily classified within any of these approaches. The view that the legislation was premised on the assumption that pipelines are merely another form of transportation[25] might suggest that the first approach was being adopted. However, this would appear to be rebutted by the fact that certain pipeline operations are exempted from the provisions of the Acts, most notably the operations of the former Victorian Pipelines Commission under the Victorian Act[26] and of "public authorities" under the New South Wales Act.[27] If the intention was to enact general pipeline legislation aimed at, *inter alia*, the coordination of pipeline routes, the exclusion of certain types of pipelines would not appear to be justified.

In fact, the Victorian and New South Wales Acts are inadequate half-way houses. On the one hand, they are general in their approach, which probably explains the absence of provisions in those Acts dealing with the control of entry into the pipeline business, in the sense discussed earlier,[28] and the lack of minimum measures designed to avoid "competitive abuses", such as

a requirement that pipeline tariffs be filed in the case of oil and gas pipelines, notwithstanding that this latter form of control was recommended by the Hetherington Report in the case of Victoria.(29) On the other hand, both Acts do contain some provisions which were obviously prompted by considerations which are relevant to the operation of oil and gas pipelines but which it cannot be said, in the infancy of solids pipelining, would be appropriate to other pipelines.(30)

It is respectfully submitted that, at this early stage in the development of solids pipelines, the legislation should be restricted to oil and gas pipelines only, in accordance with either the second or third approaches outlined.(31) At this point in time, the second approach is preferred. It is submitted that the third approach might result in an undesirable duplication of expertise as it would require a separate pipeline administration in addition to whatever general energy administrations the respective governments may have. Furthermore, the third approach may be less desirable in principle in that it might tend to isolate the role of oil and gas from the total energy supply and utilization picture.

It should be added that in the cases of Victoria and South Australia, which have established government authorities for gas transmission, the legislation should

probably be restricted to oil pipelines exclusively. In both States, the present legislation appears to permit the private construction of gas pipelines in addition to any pipelines operated by the respective authorities.(32) While there would not necessarily be competition between private and government pipelines, as they would presumably cover different routes, the justification for the establishment of government-owned pipelines in the first place would appear to extend to making them monopolies throughout the State. The legislation in both States as presently enacted could, indeed, even permit the licensing of a private gas pipeline without any reference to the respective government pipeline authorities.

(ii) Restriction to Trunk Pipelines:

These observations suggesting the restriction of the pipeline legislation to oil and gas pipelines also raise the question of the point at which pipeline regulation commences and, indeed, ends. The Victorian Act at present does not distinguish between gathering lines in the producing fields, trunk lines and, in the case of natural gas, reticulation lines.(33) It is submitted that the legislation should concern itself primarily with trunk pipelines. Gathering lines are an aspect of petroleum production and their regulation is better dealt with in legislation dealing with that stage of the petroleum

industry. Reticulation lines are an aspect of the gas utility business which will in all likelihood be subject to separate legislation and which raises far more local questions than do trunk pipelines. Any general pipeline legislation aimed primarily at the coordination of pipeline routes might apply to all three types but legislative treatment of the main policy issues discussed in this study ought to be restricted to trunk pipelines.

It is submitted on this aspect of the application of the Acts that the approach of the Western Australian *Petroleum Pipelines Act*(34) deals adequately with the question. The definition of "pipeline" in that Act excludes, *inter alia*:(35)

> a pipeline that is used -
>
> (i) for the conveyance of petroleum from the well head to a tank or separator or for the collection of petroleum within the area in which it is produced or recovered;
>
> (ii) for returning petroleum to a natural reservoir;
>
> (iii) for the conveyance of petroleum for use for the purpose of petroleum exploration operations or operations for the recovery of petroleum;
>
> (iv) for the conveyance of petroleum that is to be flared or vented.

The exclusion of pipelines constructed under the authority of any other Act or by public authorities(36) would appear to effectively exclude gas reticulation systems.

It should be noted that the Victorian Act excludes from the definition of "pipeline" any pipeline "excluded from the provisions of this Act by Order of the Governor in Council."(37) While this power no doubt may be used to exclude the application of the Act to gathering systems or reticulation systems, it is submitted that the matter should not be left to this form of administrative discretion.

Finally, in relation to the application of the Acts, it should be noted that the definitions of pipelines are generally wide enough to include associated works and structures, such as storage facilities and pumping stations. Again it is submitted that the specific enumeration in the Western Australian Act of, *inter alia*, loading terminals, pumps and tanks(38) is preferred to the more general phrase of "all apparatus and works associated with the pipe" in the Victorian Act.(39)

SECTION II

PROVISIONS FOR PRELIMINARY SURVEYS

Government licensing of oil and gas pipelines is generally effective at two stages. The first is at the stage of entry into the pipeline business and is usually effected through a basic requirement that a licence

be held for the construction of a pipeline. The second is at the stage where a pipeline has been constructed and is about to commence operations, and may take the form of requiring leave to be granted for the opening of a pipeline. In many respects, other provisions of pipeline legislation are merely supportive of these two basic requirements relating to the control of entry into the pipeline business and the control of the operation of pipelines.

Of the two, control of entry into the pipeline business is the more important in terms of the policy issues discussed earlier.(40) However, before a decision to license a particular pipeline can be taken, regardless of the criteria on which that decision is based, a proposal for a particular pipeline must of course be made. This obvious fact in turn gives rise to the need for a legislative framework whereby sufficient work can be done by the proponents of a pipeline project to permit them to present to the licensing authority adequate information on which to make its decision as to whether there should be entry into the pipeline business in the particular case.

The conflict which may arise in relation to the question of preliminary surveys is this. On the one hand, adequate provision should be made for the collection of detailed information as to, for example, the route of a pipeline *before* any decision to permit construction of

that pipeline is taken by the appropriate regulatory agency. On the other hand, there may be pressure to have the decision taken at the earliest possible time to avoid the incurring of substantial expenditures on the basis of a mere possibility. There may be the further difficulty that, even if provision is made for the collection of detailed information prior to the major decision being taken, the fact that large expenditures will have been made,(41) and perhaps, too, conditional contracts entered into, may act as a pressure on the licensing authority not to deny permission for construction of the line except on stronger grounds than may otherwise be required.

It is submitted, therefore, that, although provisions in pipeline legislation for preliminary surveys are in one sense procedural, they require careful consideration in light of the foregoing comments.

The Victorian Act provides:(42)

> Subject to the regulations a person proposing to apply for a permit to own and use a pipeline may, after obtaining the consent of the Minister, enter upon any Crown or other lands lying in the intended route of the pipeline to make surveys or examinations.

The regulation making power, although drawn in the usual form permitting regulations "for carrying on the purposes of this Act",(43) does not specifically refer to regulations relating to preliminary surveys.

The provisions of the Western Australia Act(44)

are much more detailed in that they specifically empower a person authorized by the Minister to do all things necessary for the purpose of the survey and investigation[45] and impose upon such person the duty to give notice to owners or occupiers[46] to repair any damage[47] and to pay compensation.[48] These separate provisions dealing with repairs and compensation during preliminary surveys are necessary as the general requirements in the Act relating to compensation refer only to damage caused by "a licensee"[49] which, of course, a person conducting a preliminary survey, by definition, is not.

The South Australian legislation provides for preliminary surveys but permits such surveys in pursuance of a pipeline licence *or* with the authority of the Minister.[50] It is submitted that insofar as this suggests that a licence may be issued without detailed plans as to route being submitted, it is objectionable on the grounds discussed earlier.[51] The provision is perhaps in any event inconsistent with the requirement that applications for a pipeline licence are to be accompanied by maps and plans showing the proposed route[52] but it does raise the possibility that the Minister need not consider a detailed route plan. It is submitted that the preliminary survey procedure ought to be separated from construction surveys conducted pursuant to a licence.

The Queensland Act authorizes the Governor in

Council to grant permission to enter lands for the purposes of investigations in relation to "the construction, or proposed or contemplated construction" of a pipeline.(53) Again, as in the case of the South Australian Act, it is submitted that procedures relating to preliminary surveys ought to be clearly separated from the powers of a licensee.

The New South Wales Act, until amended recently(54), unwisely adopted the approach that the basic decision to proceed with a proposed pipeline should be made *before* preliminary surveys were undertaken. The Act formerly provided:(55)

> Where a person desires to construct a pipeline, he may submit to the Minister a proposal for the construction of the pipeline and apply to the Minister for a permit to enter and carry out surveys of the lands on which he desires to construct the pipeline.

An application for a permit was required to be accompanied by a plan showing only "the approximate route" of the pipeline.(56) Once a permit was granted at this early stage, the holder thereof virtually became entitled to the necessary licence.(57) Thus, the most critical decision in the regulation of pipelines was made at the earliest possible stage, which it is submitted, represented a complete capitulation to the demands of industry that expenditures on a prospect only should be avoided.

That this was the intention, was virtually

admitted by the Government in the Parliamentary Debates:(58)

> The Committee first found difficulty in reconciling on the one hand the wishes of various government departments and authorities to have for their particular interests a decisive power of veto on any pipeline proposed with on the other hand the obvious requirement from the points of view of the industry itself and general efficiency that such a power of veto should be centralised although representative and that there should be a point of time early in the planning stage at which it should be exercised or decisively foregone. Industry was adamant that it would be quite impossible to commence an important and expensive project unless it were certain that both work and money would not be thrown away by a later reversing decision. All concerned started with the hypothesis that the making available of natural gas to the industries and the community of this State was not only desirable but also essential. The bill accordingly provides that the necessary decision of yes or no is to be made at the permit stage - that is the stage where initial authority is sought to enter on the lands over which it is intended to run a pipeline route and to carry out the necessary surveys.

The subsequent claim that "the decision to grant or refuse a permit which from one aspect is the point of no return is hedged about with extreme care for both public and private interests"(59) was not supported by the provisions of the Act. In any event, the power in the Minister to cancel a permit "for reasons that he thinks sufficient"(60) seemed to defeat the purpose of the approach.

Perhaps the explanation for this former

willingness to bow to the demands of industry, a willingness which has not been displayed in this respect by the Governments of all States which in fact have pipelines at the time of writing, is found in the fact that New South Wales is the only mainland State without indigenous reserves of oil or gas. Any decision on its part to supply local markets does not therefore involve a decision to exploit any of its own reserves for a particular purpose. It is submitted, however, that this fact still did not justify a scheme whereby "the point of no return" was reached on such superficial evidence.

These criticisms have been largely answered by amendments to the Act in 1973[61] which make it clearer that the permit stage is a preliminary stage only, essentially for the purposes of carrying out surveys to enable a detailed application for a licence to be made. The most objectionable feature of the former procedure whereby there was almost automatic entitlement to a licence has been removed by providing that the Governor may grant a licence "as he thinks fit."[62]

SECTION III

THE LICENSING REQUIREMENTS

(i) Information and Criteria:

The provisions of the Acts relating to preliminary surveys lead directly to a consideration of the basic licensing requirements. Indeed, there is an interrelationship between the two to the extent that the information which can be made available to the licensing authority may depend to a considerable extent on the ability to conduct preliminary surveys. From another point of view, if the basic decision to proceed with a pipeline is to be made at the stage of the preliminary survey, as was formerly the case under the New South Wales Act, then the details of the licensing requirements, particularly in terms of the information to be filed and the criteria on which a decision is to be made, may be mere window dressing.

In the following discussion, it should be borne in mind that there are two aspects to the licensing requirements. The first is the information which is required to be filed in support of an application for a licence and the second is the criteria on which the decision to issue a licence is to be based. There is no uniform approach to either aspect in the Australian legislation.

The only common feature of the Acts in this respect is a general prohibition against the construction of pipelines without a licence or permit, the terminology of the Acts not being uniform.(63) Furthermore, most of the provisions require the filing of information relevant to the issues discussed earlier in relation to controlling entry into the pipeline business(64) without any specific requirement that such information be considered in reaching a decision on whether or not to issue a licence.

The Victorian Act is perhaps the least satisfactory on this question in that it requires only limited information to be filed(65) and does not specify any criteria on which a decision is to be based.(66)

The Western Australian Act, on the other hand, contains quite detailed provisions relating to information to be set out in an application(67) and specifically enumerates matters to be considered by the Minister including, alone of all the Acts, "the public interest".(68) The Act provides that an application shall be accompanied by particulars of:(69)

> (i) the design and construction of the proposed pipeline;
>
> (ii) the provisions for cathodic protection of the proposed pipeline;
>
> (iii) the size and capacity of the proposed pipeline;
>
> (iv) the proposals of the applicant for work and expenditure in respect of the construction of

the proposed pipeline;

(v) the technical qualifications of the applicant and of his employees;

(vi) the technical advice available to the applicant;

(vii) the financial resources available to the applicant.

The Act also requires the filing of a route plan to an approved scale[70] and particulars of the lands that will need to be acquired.[71] Furthermore, an application[72]

> shall be accompanied by any agreements entered into, or proposed to be entered into, by the applicant for or in relation to the supply or conveyance of petroleum by means of the proposed pipeline.

The section does not specifically refer to the extent of reserves of oil or gas available to the pipeline or to proposed markets. This shortcoming is perhaps the only defect of the section in terms of gathering information relevant to a decision on the criteria discussed above in relation to controlling entry into the pipeline business.[73]

As mentioned, the Act specifically enumerates the matters which the Minister shall consider in passing upon an application. Section 10(2) provides:

> In considering any such application the Minister shall generally have regard to -
>
> (a) the public interest;

> (b) the financial ability of the applicant to construct, operate and maintain the proposed pipeline;
>
> (c) whether the construction of the proposed pipeline on the lands specified in the application would contravene any town planning scheme...; and
>
> (d) whether the construction and operation of the proposed pipeline on the lands specified in the application would be unsuitable by reason of the proposed pipeline being likely to interfere unnecessarily with improvements, improved land, flora, fauna or scenic attractions or for any other reason that the Minister thinks sufficient.

While the phrase "the public interest" may be difficult to define in precise terms, it is submitted that its specific enumeration in this section gives legislative recognition to the fact that a decision to construct an oil or gas pipeline is something more than a decision to establish "simply another form of transportation."(74)

It should be further noted before leaving this aspect of the Western Australian Act that a specific procedure is to be followed where the Minister intends to refuse an application.(75) Essentially, he must indicate reasons for the proposed refusal, provide an opportunity for matters to be submitted and then take into account particulars of any matters so submitted. The Victorian Act, on the other hand, simply requires the Minister to consider "any objections" without having indicated whether or not he proposes to issue a permit.(76)

The New South Wales Act requires the filing of particulars[77] in terms similar to those of the Western Australian Act. However, until the 1973 Amendments to that Act,[78] the basic decision to permit construction of a pipeline under this Act was made upon application for a permit to enter and carry out surveys.[79] Therefore, while the Act required certain particulars to be stated in an application for a permit,[80] it is submitted that they were largely meaningless when considered in the absence of a detailed proposal. More detailed particulars were required to be filed in an application for a licence[81] but, it is submitted, this requirement was mere symbolism in view of the fact that under the procedure of the former provisions, the basic decision would have been made already at the permit stage.

It is submitted that the procedure was entirely unsatisfactory. How could the Governor properly consider, at the permit stage, when only "an approximate route" had been indicated,[82] whether a proposed pipeline would be unsuitable on, for example, environmental grounds?[83] These objections aside, and notwithstanding the 1973 Amendments, at neither the permit nor licence stages is the Minister or the Governor required to consider "the public interest" as under the Western Australian Act.[84]

Under the South Australian Act, applications for licences are to be made in the prescribed form and

are to be accompanied by maps and plans showing the proposed route, size and capacity of the pipeline.(85) The Minister is to consider all relevant matters, particularly the financial resources of the applicant, the interests of any person who does or might require the use of the pipeline and any public or private interest that might be affected.(86)

The Queensland Act(87) is silent as to both the form of applications for pipeline licences and the criteria which the Governor is to consider.

(ii) Publicity:

The next aspect of the licensing procedure to be discussed is the question of publishing particulars of pending applications. In view of the fact that pipeline construction will inevitably involve the expropriation of easements or rights-of-way, there is an obvious need for due publicity to be given to plans for proposed pipelines to permit affected landowners to make submissions to the appropriate authority.

However, in view of the public interest aspect of any decision to construct a particular pipeline,(88) it is submitted that there is a wider ground on which publicity should be given to enable submissions to be made by interested parties and not merely by those who are directly affected by the threat of expropriation. The

Australian legislation generally contains provisions requiring that publicity be given to pending licence applications but these provisions appear to be directed almost exclusively towards ensuring that those whose property will be affected are fully informed and not towards the wider policy issues that are involved.

The Victorian Act requires the Minister to publish in the Government Gazette, one daily newspaper with general circulation and such other newspapers which circulate in local areas as he considers necessary, notice that he has received an application and that a map showing the proposed route is available for inspection.(89) It is clear from the wording of the section, and also from the fact that not even this provision was contained in the Bill as originally submitted to Parliament,(90) that the Government's mind was directed only towards publicity of the route of any proposed pipeline and not towards the question of whether the pipeline should be built at all. This observation is further supported by a reference in the Parliamentary Debates to the likely use of the Minister's power to require that notice be given to "such persons as the Minister considers necessary"(91) to give notice to "for example, the State Rivers and Water Supply Commission, the Forests Commission, local Sewerage and waterworks trusts and so on."(92)

Even the Western Australian Act, which, it will

be recalled, specifically requires the Minister to consider "the public interest"[93] has only limited publicity requirements,[94] along lines broadly similar to those of the Victorian Act. However, in this limited form it represents an improvement over the Victorian procedure in that an applicant is required to notify each owner and occupier at the time of the application.[95]

There are two matters related to the publicity question which should be noted. The first is that none of the Acts provides for any type of hearing procedure at which submissions might be made on "the public interest" aspects of any decision to license a pipeline. The other matter is the question of who the licensing authority should be.

(iii) The Licensing Authority:

Under the present legislation, licences or permits are issued by either the Governor[96] or the appropriate Minister.[97] In the absence of any meaningful requirements in the Acts that the policy matters discussed above[98] be considered, the present procedure in this respect is probably satisfactory. However, in view of the submission that these matters *should* be considered before any decision to construct a pipeline is taken, it is submitted that a licensing board, capable of conducting hearings and making recommendations on these matters,

should be the licensing mechanism.

In view of the approach to pipeline legislation advocated earlier,[99] such a board should not be concerned exclusively with pipelines but should be an *energy* board. It might have final authority or might simply make recommendations to the cabinet level, the latter approach being preferred as the questions involved in the regulation of energy ought not to be determined solely on technical grounds as they inherently involve political considerations.

SECTION IV

COMPULSORY ACQUISITION PROVISIONS

All of the Acts contain procedures for pipeline licensees to compulsorily acquire the necessary easements or rights-of-way and lands for pumping and storage facilities.[100] It is not proposed to examine the relevant provisions in any detail as they raise separate issues from those involved in the regulation of oil and gas pipelines as such. A couple of observations should, however, be made.

Despite some reservations expressed in the Parliamentary Debates about the principle of private companies being endowed with powers of expropriation,[101] such

powers are necessary in pipeline legislation. Pipelines simply could not be built if the companies were forced to rely on the voluntary acquisition of rights with respect to every parcel of land over which a pipeline crossed.(102) The concern of the legislation, therefore, ought to be with ensuring that proper procedures are followed in compulsory acquisitions and that pipeline companies are fully responsible for compensation and minimising damage.

The Australian legislation is generally satisfactory in these respects. Taking the Western Australian Act as an example, it first provides that a licensee must make reasonable attempts to acquire necessary land or easements by agreement with the owners thereof.(103) In the event that these attempts are not successful, the Minister, on the application of the licensee and at his expense, may "take under the Public Works Act, 1902, as if for a public work."(104) Lands so taken then vest in the licensee.(105) In addition to the incorporation of the Public Works Act, and, with it, its provisions relating to compensation, there is a general provision in the Act that any licensee shall make full compensation for any damage.(106)

SECTION V

OPERATING PROVISIONS - SAFETY AND POLLUTION

As mentioned earlier,[107] pipeline legislation generally operates in two stages. The first is at the construction stage and the second is at the operating stage. All of the Australian Acts require some form of approval for the commencement of pipeline operations.

The two stage approach is perhaps best illustrated by the provisions of the Western Australian Act. Section 6 provides:[108]

> 6.(1) A person shall not-
>
> (a) commence, or continue the *construction* of a pipeline; or
>
> (b) *alter* or *reconstruct* a pipeline, except under and in pursuance of a *licence*.
>
> (2) A person shall not *operate* a pipeline-
>
> (a) except under and in pursuance of a licence; and
>
> (b) unless he has obtained the *consent* of the Minister under section 36 to the *commencement or resumption*, as the case may be, of operations and commences or resumes operations in accordance with the conditions, if any, specified in the *instrument of consent*.

Section 36(1) provides:

> 36.(1) The Minister, on application in writing served on him -

> (a) by a licensee whose pipeline has not previously been in operation; or
>
> (b) by a licensee who has ceased to operate the pipeline specified in his licence,
>
> may, if he is of the opinion that the pipeline may be operated with safety, by instrument in writing served on the licensee, consent to the commencement or resumption, as the case may be, of operations.

The Act further provides that a pipeline shall be constructed along the route authorized in the licence, subject to lateral deviation within limits authorized by the Minister,(109) and shall comply with prescribed standards, specifications and conditions.(110) These provisions are reinforced by further sections, among others, relating to the waste or escape of any substance from a pipeline,(111) construction of pipelines over or under any waters(112) and the appointment of inspectors.(113)

Unfortunately, the scheme of the Victorian Act(114) does not as clearly follow the simple two stage procedure of the Western Australian Act. The Act does not draw a clear distinction between *construction* on the one hand and *operation* on the other. Section 8 provides that no person shall "own or use" a pipeline unless he holds a permit. Section 25 provides that no person shall "construct or operate" a pipeline unless he holds a licence.(115) Section 35 then provides that a licensee shall not operate a pipeline unless the Minister has informed him in writing

that "the pipeline is fit to be so operated". The intention appears to have been to divide jurisdiction over pipelines between the Minister for Fuel and Power and the Minister for Mines roughly along the lines of the policy issues involved in pipeline construction and the technical, safety issues involved in pipeline construction and operation respectively. Part II of the Act is headed "Permits for the Ownership and Use of Pipelines" and the Minister is the Minister for Fuel and Power.(116) The licensing and operation provisions are found in Part IV which is entitled "Construction Operation and Inspection of Pipelines" and in respect of which the Minister is the Minister for Mines.(117)

It is submitted that the Western Australian approach is to be preferred in that it avoids divided responsibilities and is administratively simpler.

SECTION VI

MISCELLANEOUS PROVISIONS

There is a number of miscellaneous provisions in the Acts which should be mentioned.

The Victorian and Western Australian Acts provide for security to be lodged by pipeline licensees up

to $20,000.[118] There is authority to use the security for the payment of any amount due from the licensee "for anything arising out of the construction or operation of the pipeline"[119] but in view of the relatively small amount of the security, it is suggested that this authority is rather hollow. The Western Australian Act contains a further provision requiring security to be given, in addition to any other security required by the Act, for the payment of all compensation in respect of any land or easement to be taken by compulsory acquisition and for the payment of all charges and expenses necessary for or incidental to any compulsory acquisition.[120]

Related to the security provisions are provisions in some of the Acts permitting the Minister to remedy certain situations at the expense of the licensee. Under the Western Australian Act, for example, the Minister may give to a licensee directions as to any matter with respect to which regulations may be made under the Act.[121] Where a person does not comply with a direction, the Minister may do anything required to be done by the direction.[122] Costs incurred are a debt due to the Crown. There are similar provisions in the Act specifically empowering the Minister to remove and dispose of any property and to make good any damage to the licence area.[123]

In the line of "self-help" remedies under the Acts, reference should be made to certain provisions aimed

at the restoration of agricultural lands after pipeline construction.[124] This question, understandably in view of the importance of agriculture in the Australian setting, was the topic of considerable concern in the Parliamentary Debates[125] but it is submitted that, in view of the necessity for pipelines to cross agricultural lands, the legislation generally provides adequate protection.

The Western Australian Act provides that, where a pipeline crosses agricultural land, the licensee shall forthwith after completion of construction of the line, restore the land to enable it to be used as far as practicable for the purposes for which it was previously used.[126] If the licensee fails to restore the land, any person entitled to an interest in the land, may restore it and recover from the licensee expenses reasonably incurred.[127] It is submitted that this is a highly desirable feature of the Act.

In addition to the various provisions of the Acts arming the Minister and landowners with weapons to use in the event that licensees do not fully comply with the conditions of their licences, the Acts provide for the cancellation of licences. Under the Victorian Act, the Governor in Council may cancel a permit where he decides that "because of the seriousness of any contravention of, or the number of contraventions of, the Act or the regulations the permit should be cancelled."[128]

The Western Australian Act contains a similar provision[129] but goes on to provide in detail for the removal of property and the restoration of damaged property in such an event.[130]

As a further means of control over pipelines, the Acts generally provide for the registration of licences and related instruments.[131] Such provisions are necessary for two main reasons. First, they permit the appropriate authorities to control transfers of licences which is necessary if it is assumed that the question of who should build pipelines is a matter affected with a "public interest".[132] Secondly, a system of registering interests in pipelines is necessary because of the financing arrangements whereby the security will frequently be the pipeline itself. The normal system for registration of interests in land may not be adequate on its own in the case of pipelines as the Acts may provide that a pipeline shall remain the property of a licensee notwithstanding that it may be affixed to any land.[133]

FOOTNOTES - CHAPTER V

(1) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(2) Chapter VI, *infra*, at pp. 187 *et seq.*

(3) *See*, for example, the comments in Chapter IV, Section IV, *supra*, at p. 133.

(4) The *Pipelines Act 1967*, Act No. 7541 of 1967 of Victoria, as amended by the *Pipelines (Amendment) Act 1971*, Act No. 8131 of 1971; the *Pipelines Act, 1967*, Act No. 90 of 1967 of New South Wales, as amended by the *Pipelines (Amendment) Act, 1973*, Act No. 86 of 1973; the *Petroleum Pipelines Act, 1969*, Act No. 112 of 1969 of Western Australia, as amended by the *Petroleum Pipelines Act Amendment Act, 1970*, Act No. 42 of 1970.

(5) The *Petroleum Acts, 1923-1967*, particularly as amended by the *Petroleum Acts Amendment Act of 1962*, Act No. 30 of 1962 of Queensland; the *Mining (Petroleum) Act 1940-67*, particularly as amended by the *Mining (Petroleum) Act Amendment Act, 1967*, Act No. 75 of 1967 of South Australia. Tasmania has only limited provisions dealing with pipelines in its mining legislation and is not considered further.

(6) In Victoria, section 3 of the Act, *supra* n. 4, defines "pipeline" to mean, in part, "a pipe or system of pipes for the conveyance of anything." In New South Wales, section 3(1) of the Act, *id.*, uses the words "for the conveyance of any substance, whether in a gaseous, liquid or solid state".

(7) "The Government is convinced that Victoria will soon be concerned with an increasing number of propositions for the construction of pipelines and therefore proposes to establish control by the Government of the transportation by pipelines of gases, liquids and solids of all types. All pipelining not already dealt with by various statutory enactments can be covered by a single Act. This is the purpose of the Bill." Sir Henry Bolte, Victorian Parliamentary Debates, House of Assembly (hereinafter abbreviated as V.P.D., H.A.), February 14, 1967, at p. 2966. "The following principles and assumptions were to be observed. Pipeline conveyance of all suitable substances was to be catered for not only

petroleum." A.D. Bridges, Parliamentary Debates of New South Wales (hereinafter abbreviated as P.D.N.S.W.), December 5, 1967, at p. 4062.

(8) For example, section 4 of the Victorian Act, *supra* n. 4; Section 5(1)(f) of the New South Wales Act, *id.*

(9) For example, *per* B.J. Evans, V.P.D., H.A., March 2, 1967, at p. 3264.

(10) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(11) R.S.A. 1970, c. 275.

(12) R.S.A. 1970, c. 267.

(13) *Id.*, Part 10.

(14) R.S.A. 1970, c. 158.

(15) R.S.A. 1970, c. 157.

(16) For example, section 34, *supra* n. 12.

(17) Chapter IV, Section III(i), *supra*, at pp. 114 *et seq.*

(18) R.S.C. 1970, c. N-6.

(19) For example, section 44, *id.*, requires the National Energy Board, in issuing a certificate of public convenience and necessity, to take into account, *inter alia*, the availability of oil or gas to the pipeline, the existence of actual or potential markets, the economic feasibility of the pipeline and "any public interest" that may be affected.

(20) For example, section 44(d), *id.*

(21) Part IV, *id.*

(22) Section 66, *et seq.*, *id.*

(23) Sections 38 and 39, *id.*

(24) For example, sections 52, 55, 59 and 60, *id.* For further discussion of these provisions, *see* Chapter III, Part II, *supra*, at pp. 80 *et seq.*

(25) *See supra* n. 9.

(26) *Supra* n. 4, section 4(2).

(27) *Id.*, section 5(1)(b).

(28) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(29) *See* further, Chapter IV, Section III, *supra*, at p. 126.

(30) Both Acts contain provisions which are apparently intended to serve the same function as common carrier provisions in oil and gas pipeline legislation. In the Victorian Act, *supra* n. 4, *see* section 17, and in the New South Wales Act, *id.*, *see* section 23. These provisions are discussed in more detail in Chapter VII, *infra*, at pp. 234 *et seq.*

(31) *Supra*, at pp. 147-9.

(32) As already noted, *supra* n. 6, the Victorian Act, *supra* n. 4, deals with pipelines for the conveyance of "anything". The South Australian Act, *supra* n. 5, deals with pipelines "for the conveyance of petroleum" and "petroleum" is defined as any naturally occurring hydrocarbon in a gaseous, liquid or solid state. *See* section 3(1).

(33) *See* the definition of "pipeline" in section 3 of the Act, *supra* n. 4.

(34) *Supra* n. 4.

(35) *Id.*, section 4(1). The New South Wales Act, *id.*, contains a similar provision, in different wording, in section 5 which has the desirable additional features that, first, nothing in the exclusion provisions prevents a person from applying for and being granted a permit or licence in respect of a pipeline which is excluded from the Act and, secondly, the Minister may declare a pipeline from a well to another pipeline to be a gathering line for the purposes of the Act and, therefore, excluded from the licensing requirement. *See* section 5(2). The South Australian Act, *supra* n. 5, appears to exclude gathering pipelines by restricting the definition of "pipeline" to a pipe for the conveyance of petroleum "that has been recovered from a field, from or from the vicinity of the field to any other place". *See* section 3(1). The definition specifically excludes a pipe "used for or incidentally to operations for the recovery of petroleum or for the treatment, processing or refining of petroleum."

It is submitted that the wording of the last part of this exclusion might be improved as it is open to the argument that a trunk crude oil pipeline to a refinery is a pipe used for the refining of petroleum. The definition of "pipeline" in the Queensland Act, *id.*, specifically *includes* "flow lines from wells, gathering lines and main lines" but excludes "flare lines and similar pipelines at wells being drilled for petroleum." *See* section 3.

(36) Section 4(1). The New South Wales Act contains similar provisions in section 5(1)(a) and (b). That these provisions in the New South Wales Act were intended to exclude gas reticulation systems is apparent from section 5(6) which provides that any exclusion under the relevant parts of section 5(1) does not include a pipeline constructed by a gas company, as defined in the *Gas and Electricity Act, 1935*, "where the pipeline is or is to be used principally for the conveyance of gas otherwise than for the purpose of reticulating it directly to customers." In other words pipelines operated by gas companies otherwise than for reticulation are covered by the Act but reticulation systems are not.

(37) *Supra* n. 4, section 3. In the New South Wales Act, *id.*, *see* section 5(4).

(38) *Id.*, section 4(1).

(39) *Id.*, section 3, the New South Wales Act, *id.*, section 3(7), more closely follows the Victorian Act, whereas the South Australian Act, *supra* n. 5, section 1(2), and the Queensland Act, *id.*, section 3, are closer to the Western Australian definition in this respect.

(40) Chapter IV, Section III, *supra* at pp. 114 *et seq.*

(41) Canadian Arctic Gas Study Ltd. reports that its costs prior to submitting its application to the National Energy Board of Canada for approval to construct the Mackenzie Valley natural gas pipeline were $50 million, mainly for design, engineering and testing.

(42) *Supra* n. 4, section 9(2).

(43) *Id.*, section 47.

(44) *Supra* n. 4.

(45) *Id.*, section 7(2). The section should be criticized, however, in that it leaves the decision as to what is necessary in the hands of the person authorized to enter by the Minister. On the other hand, the provisions relating to payment of compensation perhaps provide an adequate safeguard. *See* n. 47 and n. 48, *infra*.

(46) *Id.*, section 7(3). The qualification in the section that notice need be given only "if practicable" was the subject of some criticism in the Debates. *See*, for example, Parliamentary Debates of Western Australia, November 5, 1969, at pp. 2192, 2194-5, 2196.

(47) *Id.*, section 7(4).

(48) *Id.*, section 7(6).

(49) *Id.*, section 57(2). The wording of the section may be defective in that it refers only to "maintaining or operating any pipeline" and not specifically to damage caused in the course of *construction* of any pipeline. The Victorian Act, *supra* n. 4, in its general provision dealing with compensation, section 43, is broader in that it refers to damage caused "in the exercise of any powers under this Act," but it too suffers from the defect that it is restricted to damage caused by "a licensee".

(50) *Supra* n. 5, section 80d(2).

(51) *Supra*, at pp. 154-5.

(52) *Supra* n. 5, section 80e.

(53) *Supra* n. 5, section 45(2).

(54) The *Pipelines (Amendment) Act, 1973*, *supra* n. 4.

(55) The *Pipelines Act, 1967*, *supra* n. 4, section 6(1).

(56) *Id.*, section 6(2)(c).

(57) *Id.*, sections 14 and 15. Although the issue of a licence was not completely automatic, under section 14 the Governor was not to refuse an application for an "instrument of approval" unless certain conditions were fulfilled and, under section 15, the applicant was "entitled to be granted by the Governor the licence" when certain other conditions were met.

(58) *Per*, A.D. Bridges, P.D.N.S.W., December 5, 1967, at pp. 4062-3.

(59) *Per*, Mr. Fife, P.D.N.S.W., November 29, 1967, at p. 3883.

(60) *Supra* n. 55, section 9(3).

(61) *Supra* n. 54.

(62) Inserted in section 14(1) by the amending Act of 1973.

(63) The Victorian Act, *supra* n. 4, section 8 (a permit); the Western Australian Act, *id.*, section 6 (a licence); the New South Wales Act, *id.*, section 11 (a licence); the South Australian Act, *supra* n. 5, section 80d(1) (a licence). The Queensland Act, *id.*, does not appear to contain any express prohibition against the construction of a pipeline without a pipeline licence. The general tenor of the provisions of the Act dealing with pipelines, however, seems to presuppose that pipelines may be constructed and operated only pursuant to a licence granted under Section 45(3)(a).

(64) Chapter IV, Section III(i), *supra*, at pp. 114 *et seq*.

(65) *Supra* n. 4, section 10.

(66) *Id.*, section 12(1) simply requires the Minister to consider "any objections that may be made" without specifying whence such objections might come.

(67) *Supra* n. 4, section 8.

(68) *Id.*, section 10. The Minister shall consider "any representations made to him", but, as with the Victorian Act, *see supra* n. 66, there is no indication of any procedure by which such representations might be made. *See* further, *infra*, at pp. 167-8.

(69) *Supra* n. 4, section 8(1)(c).

(70) *Id.*, section 8(1)(d)

(71) *Id.*, section 8(1)(f). *See* also, section 8(1)(e) requiring particulars with respect to any agreements or proposed agreements for the acquisition of easements.

(72) *Id.*, section 8(1)(g).

(73) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(74) *See supra* n. 9.

(75) *Supra* n. 4, section 9.

(76) *Supra* n. 4, section 12(1).

(77) *Supra* n. 4, section 13.

(78) *Supra* n. 54.

(79) *See supra* at pp. 157-9.

(80) *Supra* n. 55, section 6.

(81) *Id.*, section 13.

(82) *Id.*, section 6(7)(c).

(83) *Id.*, section 8(2) provides:

> The Minister shall, in considering an application for a permit, take into consideration whether the construction of a pipeline on the lands specified in the application -
>
> (a) would contravene the provisions of any town and country planning scheme...; or
>
> (b) would be unsuitable by reason of the pipeline or any apparatus or works being likely to interfere unnecessarily with -
>
> (i) improvements or improved lands;
>
> (ii) any flora, fauna, fish, fisheries and scenic attraction on or in the vicinity of the lands specified in the application; or
>
> (iii) any features of architectural, archaeological, historical or geological interest on or in the vicinity of the lands specified in the application.

(84) *See supra*, at pp. 162-3.

(85) *Supra* n. 5, section 80 e.

(86) *Id.*, section 80 g.

(87) *Supra* n. 5.

(88) *See* the comments in Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(89) *Supra* n. 4, section 11.

(90) The section was inserted during consideration of the Bill in the Upper House. *See* V.P.D., L.C., March 14, 1967, at pp. 3535-6.

(91) *Supra* n. 4, section 11(3).

(92) *Per*, Sir Henry Bolte, V.P.D., H.A., February 14, 1967, at p. 2967.

(93) *See* comments *supra*, at pp. 162-3.

(94) *Supra* n. 4, section 8(4) and (5).

(95) *Id.*, section 8(3)(b). Under the New South Wales Act, *supra* n. 4, as to the publicity requirements generally, *see* sections 6(5) and 7 in relation to applications for permits and section 13(3) in relation to applications for licences; *see* also section 56. In the Queensland Act, *supra* n. 5, there are no specific requirements for the publication of any notice relating to licence applications although, under section 45(3)(a), the *grant* of a licence shall be notified in the Gazette. Under the South Australian Act, *supra* n. 5, section 80f, notice of an application by the applicant may be required to be given to such persons as the Minister may specify.

(96) The Queensland Act, *supra* n. 5, section 45(3)(a). Under the New South Wales Act, *supra* n. 4, the Minister issues permits under section 8 but the Governor issues licences under section 15.

(97) The Victorian Act, *supra* n. 4, section 12; the Western Australian Act, *id.*, section 10; the South Australian Act, *supra* n. 5, section 80h. It is interesting to note that in South Australia it is the Minister who grants pipeline licences under the Petroleum Act, but the route of any pipeline constructed by the Natural Gas Pipelines Authority must be approved by the Governor. *See* the *Natural Gas Pipelines Authority Act, 1967*, Act No. 3 of 1967 of South Australia, section 10(2)(a).

(98) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(99) *Supra*, at p. 150.

(100) The Victorian Act, *supra* n. 4, Part III; the Western Australian Act, *id.*, sections 16 to 20; the New South Wales Act, *id.*, sections 15 to 18; the South Australian Act, *supra* n. 5, sections 80h and 80j; the Queensland Act, *id.*, sections 45 to 45E.

(101) *See*, for example, Chapter IV, Section IV, n. 93, *supra*. In the Parliamentary Debates on the Victorian Act, *supra* n. 4, in committee, a limitation was proposed in the following terms: "The Minister shall not give the permission required under [section 22(1)] until copies of the map referred to in paragraph (d) of section 10 have been laid before both Houses of Parliament for at least fourteen sitting days." *See* V.P.D., H.A., March 2, 1967, at p. 3269. On the question of compensation for pipeline easements in Canada, *see* Currie, *Compensation for Oil and Gas Surface Rights in Alberta*, 36 Sask. L. Rev. 350 (1971-72); Kirkham, *Expropriation by Pipe Line Companies in Alberta*, 8 Alta. L. Rev. 437 (1970); Lucas, *Compensation for Oil and Gas Surface Rights in British Columbia*, 36 Sask. L. Rev. 369 (1971-72); Sychuk, *Compensation for Acquisition of Surface Interests for Oil and Gas Operations in Saskatchewan*, 36 Sask. L. Rev. 350 (1971-72).

(102) *See* Chapter II, Section I, *supra*, at p. 15.

(103) *Supra* n. 4, section 19(2).

(104) *Id.*, section 19(1). Under the Victorian Act, *supra* n. 4, section 22, the permittee may compulsorily acquire with the written permission of the Minister. Under the South Australian Act, *supra* n. 5, section 80j, the licensee may, if he fails to acquire land by agreement after diligent endeavours, apply to the Minister for approval to acquire compulsorily. Under the Queensland Act, *id.*, sections 45A and 45B, necessary lands may be resumed by the Coordinator-General of Public Works or the Governor in Council, as appropriate. In the New South Wales Act, *supra* n. 4, *see* sections 21 *et seq.*

(105) *Id.*, section 19(3)(b).

(106) *Id.*, section 57(2).

(107) *Supra*, at p. 153.

(108) *Supra* n. 4, emphasis added. In the New South Wales Act, *id.*, *see* sections 11 and 25. In the South Australian Act, *supra* n. 5, *see* section 80m. There are no equivalent provisions in the Queensland Act, *id.* The Victorian Act, *supra* n. 4, is considered separately, *infra* at pp. 171-2.

(109) *Supra* n. 4, section 33.

(110) *Id.*, section 34.

(111) *Id.*, section 37.

(112) *Id.*, section 40.

(113) *Id.*, sections 62 and 63.

(114) *Supra* n. 4.

(115) Under section 25(2), *id.*, only a permittee is entitled to the issue of a licence.

(116) *Id.*, section 6.

(117) *Id.*, section 24.

(118) The Victorian Act, *supra* n. 4, section 29(1) is mandatory. Under the Western Australian Act, *id.*, section 12, conditions contained in a licence "may include" a condition for security up to a maximum of $20,000.

(119) The Victorian Act, *supra* n. 4, section 29(4). In the Western Australian Act, *id.*, *see* section 13(6)(b).

(120) *Supra* n. 4, section 10(1).

(121) *Id.*, section 41(1). In the New South Wales Act, *id.*, *see* section 28(1), which is in similar terms. The Victorian Act, *id.*, does not contain any such general provision.

(122) *Id.*, section 42.

(123) *Id.*, section 27(2).

(124) The Victorian Act, *supra* n. 4, section 33; the Western Australian Act, *id.*, section 39; the New South Wales Act, *id.*, does not contain any provisions dealing specifically with agricultural land.

(125) *See*, for example, V.P.D., H.A., March 2, 1967, at pp. 3263, 3270; V.P.D., L.C., March 14, 1967, at pp. 3540-1.

(126) *Supra* n. 4, section 39(1).

(127) *Id.*, section 39(2).

(128) *Supra* n. 4, section 19(1)(b).

(129) *Supra* n. 4, section 26. In the New South Wales Act, *id.*, *see* section 32.

(130) *Id.*, section 27.

(131) In the Western Australian Act, *supra* n. 4, *see* Part IV; in the New South Wales Act, *id.*, *see* Part IV. There are no comparable provisions in the Victorian Act, *id.*

(132) *See* generally, Chapter IV, Section III, *supra* at pp. 114 *et seq*.

(133) For example, the Western Australian Act, *supra* n. 4, section 57.

CHAPTER VI

THE GOVERNMENT PIPELINES

Three Australian jurisdictions have established government-owned pipeline authorities, in one form or another, charged with the responsibility of constructing and operating pipelines. Victoria was the first to move in this direction with the establishment of the Victorian Pipelines Commission by the *Victorian Pipelines Commission Act 1966*,(1) although the Commission has since been abolished.(2) South Australia followed the next year with the *Natural Gas Pipelines Authority Act, 1967*(3) and, in 1973, the Federal Parliament enacted the *Pipeline Authority Act 1973*(4) establishing the Pipeline Authority.

These three authorities have little in common. The Victorian Commission seems to have been established primarily to ensure that the transmission of natural gas in Victoria would be independent of the producers on the one hand and the distributors on the other.(5) However, it is clear from the Parliamentary Debates on the Act that the establishment of such an authority, and more particularly the rationale for the authority, were not properly and fully considered. For example, in its original form, the Bill for the establishment of the Commission envisaged that it would be responsible for the construction and

operation of pipelines for the transmission of "hydrocarbons", whether in liquid or gaseous state, and not only natural gas. The restriction of the Commission's authority to natural gas resulted from an amendment adopted during the course of the legislation's passage through Parliament.(6) Furthermore, within less than five years of its establishment, the Commission was abolished(7) and its powers, functions and operations were assumed by the Gas and Fuel Corporation.(8)

The Natural Gas Pipelines Authority of South Australia, although always contemplated as being concerned only with natural gas, was established mainly for the pragmatic purpose of taking advantage of the favoured borrowing position of government and semi-government authorities in Australia.(9) It is the only government pipeline authority continuing to operate exclusively as a transmission authority in Australia.

The federal Pipeline Authority seems to have been established partly in response to the need for some federal legislation enabling the construction and operation of interstate petroleum pipelines. With a Labor Government in power at the time of its enactment, it is probably not surprising that a government authority was established for this purpose. However, the main reason for establishment of the Authority seems to have been a conscious policy decision on the part of the Government

to enter the field of regulating the use of Australia's oil and gas resources.(10) The Pipeline Authority differs markedly from the two State authorities, not only in the reasons for its creation, but also in that it is concerned with the transmission of both oil and gas. Furthermore, it seems to be envisaged by the enabling Act that the Authority will play a much more important part in the general regulation of the utilization of Australia's petroleum resources.

In view of these pronounced differences between the three government pipeline authorities, the discussion in this Chapter will be divided according to the respective jurisdictions of each authority. However, as the Victorian Pipelines Commission has been abolished, the Section dealing with Victoria will be devoted primarily to an examination of the policy considerations which led to the initial establishment of the Commission and the subsequent absorption of its responsibilities by the Gas and Fuel Corporation and a comparison between the role of the Commission as it existed and the South Australian Authority.

SECTION I

THE NATURAL GAS PIPELINES AUTHORITY OF SOUTH AUSTRALIA

(i) The Establishment of the Authority:

The major incentive for the establishment of a government-owned natural gas pipeline authority in South Australia was the significant financial saving that could be achieved through this mechanism.(11) The industrial development of South Australia had been handicapped in the past by the lack of cheap indigenous sources of energy, particularly for the generation of electricity(12) and the potential supply of natural gas from the Gidgealpa-Moomba fields was thus seen as one of the most important developments in the State's history.

The Government moved swiftly to present a case to the Federal Government for financial assistance for construction of a pipeline to Adelaide markets.(13) The whole basis of the submission was that government financing of the line was necessary if the State was to derive any real benefit from the exploitation of this resource. For example, after examining in detail the savings available to a government-owned pipeline as a result of the favourable borrowing position of government authorities,(14) the submission stated:(15)

> [W]hilst there seems to be good prospect of reducing the fuel cost for generation of electricity in Adelaide by some 20% below the present cost of the most favourably priced alternative fuel, and thereby bringing it into line with the fuel cost using Leigh Creek coal at Port Augusta, *this can only be done provided that the transportation costs can be kept to a minimum by the availability of finance at the lowest practicable interest rates.*

A similar view was implicit in the following remarks of Sir Thomas Playford in the Parliamentary Debates:(16)

> Whatever success the pipeline authority has, we shall still be paying double the amount for our fuel for electricity that is paid in Victoria and New South Wales. If the producing companies did not receive anything at all for the gas at the well-head, we would still be paying immeasurably more than is paid for alternative fuels in other States.

Thus, the decision to establish a government-owned pipeline for the transmission of natural gas was determined almost exclusively on the basis of the financing arrangements.

In view of the predominant concern expressed, in both statements of Government policy and the Parliamentary Debates, for the question of pricing of natural gas within the State, the form which the Authority takes under the Act is surprising and, it is submitted, was not fully considered. The Authority was established to operate primarily as a carrier only of natural gas and not as a general regulatory authority with jurisdiction over

pricing of gas, although it seems to have been contemplated that the Authority might play an indirect role in influencing prices.

The Act envisages that the Authority may use its power to determine charges for the conveyance of natural gas[17] as a mechanism through which funds might be raised and then rebated through other instrumentalities, such as the Electricity Trust of South Australia and the South Australian Gas Company.[18] While this approach may have some merit in passing on the benefit of any funds so raised more or less directly to the principal users of natural gas and, through them, to the ultimate consumers, it is an approach which is hard to rationalize with the justification which was given for the creation of the Authority in the first place, namely, transmission at minimum cost. Furthermore, as has been submitted earlier,[19] the transportation stage in the production, distribution and marketing of natural gas would not seem to be the best stage at which to maximize the return to the State from what is, after all, a State-owned resource, regardless of whether it is decided that that return should take the form of increased revenues accruing directly to the State from royalties or taxes, or of lower prices in the market place through price regulation.

It is difficult to identify just what the policy of the Government was in this respect, as is apparent from

the following statement by the Premier during the course of the Parliamentary Debates:(20)

> The supply and price agreements with the main consumer and the conveyance charges may be determined on such a basis that the pipeline authority makes its charges to the producers broadly on the basis of what a commercially financed pipeline would require. In such an event subclauses (3) and (4) [of section 15] would be required to authorize that the appropriate margins be appropriately passed back to the public utilities. I understand that the agreement recently negotiated between the producer and the South Australian Gas Company was upon the assumption of pipeline charges on a commercial basis and accordingly, if this is to stand, some related arrangement as authorized by this section is required. In this connection I would add that, although it will of course be proper for the pipeline authority to build up proper reserves against contingencies, it is not proposed that the authority be a profit-making undertaking but rather one which secures the availability of natural gas at as low a cost to the community as is practicable.

It is submitted that this objective would have been better achieved by either restricting the operation of the Authority to a cost of service basis, plus perhaps a reasonable return on investment, and providing some other regulatory mechanism to control prices, or by expanding the power of the Authority so that it might act as a purchaser, as well as a carrier, of natural gas and thus effectively control prices.

The latter alternative could have been easily

achieved within the present framework of the Act and, indeed, was briefly raised during the Parliamentary Debates,[21] but the significance of the distinction between a transmission authority and a purchasing authority does not seem to have been fully appreciated. For example, the following statement was made in the course of the Parliamentary Debates:[22]

> The Bill seems to follow extremely closely the Act establishing the Gas Trunk Pipeline in the Canadian Province of Alberta, and that Act is regarded as model legislation for establishing pipelines... . I have examined for instance, the Acts of the Canadian Provinces of British Columbia, Saskatchewan and Ontario and the Dominion National Energy Board Act of 1959. I have legislation of the States of California and Wisconsin, District of Columbia, New York and the Federal Natural Gas Act of 1938. I also have the report of the Federal Power Commission. The point I wish to emphasize is that, although all these Acts vary in minor details, although some of their defining clauses may be different, and although some of the controlling authorities may vary (sometimes quite largely), in the main the principal features are the same. All of them appear to be common carriers, making a charge for carrying the gas from one point to another... . *The main difference in all this legislation is in the method of finance.*

The statement overlooks a fundamental distinction between the North American jurisdictions and the Authority and that is that, with the exception of the Alberta Gas Trunk Line,[23] natural gas companies in those jurisdictions invariably act as *purchasers* of gas and not merely as

carriers.[24] Furthermore, the pipeline acts referred to in many instances, if not all, are merely one part of a comprehensive regulatory regime invariably extending to pricing.[25]

It is clear from the foregoing that the decision to establish a government-owned pipeline authority in South Australia, responsible primarily for the transmission of natural gas, was not the result of a full and proper consideration of either the objectives or the methods by which they might be achieved. Even if it is assumed that, for reasons which are not apparent, the Government intended the Authority to function as a funnel through which natural gas revenues might be directed by the rebate mechanism, the Act, it is submitted is patently defective in two respects. First, it gives no indication of the criteria on which pipeline charges should be made, if they are to be made on any basis other than cost of service.[26] Secondly, it gives no indication of the criteria on which rebates might be made and, furthermore, is unduly restrictive in this respect in terms of the authorities to which rebates can be made.[27]

(ii) The Act:

The Natural Gas Pipelines Authority of South Australia is established as a body corporate[28] consisting of six members appointed by the Governor.[29]

The composition of the Authority's membership is interesting in view of the lack of precision in defining its objectives, as discussed above.(30) Two members are to be appointed on the recommendation of the Minister, one on the nomination of the Electricity Trust of South Australia, one on the nomination of the South Australian Gas Company and two on the nomination of the "producer companies". It is submitted that the balancing of interests between producers and consumers implicit in this membership is more consistent with the role of the Authority as a carrier of natural gas and is not appropriate if the intention was that the Authority should function as a regulator of prices. The domination of the membership by representatives of producers and consumers would not appear to give the degree of objectivity which would be required if transmission charges were intended to be determined in accordance with the broad public interest in prices of natural gas as a part of the total energy supply picture, rather than simply on a cost of service basis.

A further point should be noted in relation to the membership of the Authority. Two members are to be appointed "on the nomination of the producer company, if only one, or, if more than one, on the joint nomination of the producer companies."(31) A producer company is defined as:(32)

> ...any body corporate that is the holder of an oil mining licence or a petroleum production licence granted under any Act *and*, on the recommendation of the Minister of Mines, is declared by proclamation to be a producer company for the purposes of this Act... but does not include any body corporate whatsoever that has, on the recommendation of the Minister of Mines, been declared by proclamation to have ceased to be a producer company for the purposes of this Act.

However, under the provisions of the Act dealing with the obligations of the Authority to convey natural gas in particular cases - the "common carrier" provision(33) - there is no reference to "producer companies" as defined. This distinction between the two provisions raises the possibility that a company might have no representation on the Authority, nor participate in the nomination of members for appointment to the Authority, while being entitled to the benefits of the other provisions of the Act insofar as the Authority might be required to carry gas for such a "non producer company".

An attempt to alter this situation was made during the passage of the legislation through Parliament. It was moved to add to section 3 of the Act a sub-section which would require the Minister of Mines to table a report on any refusal to declare a producer to be a producer company for the purposes of the Act but the motion was defeated.(34)

The powers and functions of the Authority are to:(35)

> (a) construct, reconstruct or install or cause to be constructed, reconstructed or installed pipelines for conveying natural gas or any derivative thereof within this State and natural gas storage facilities connected therewith;
>
> (b) purchase, take on lease or otherwise by agreement acquire any existing pipeline and sell or otherwise dispose of any pipeline owned by the Authority;
>
> (c) hold, maintain, develop and operate any pipeline owned by or under the control of the Authority and convey and deliver through such pipeline natural gas and any derivative thereof;
>
> (d) make such charges and impose such fees for the conveyance or delivery of natural gas or any derivative thereof through any such pipeline as it may, with the approval of the Minister, determine.

Pausing for the moment at this point in the enumeration of the Authority's powers and functions, a number of observations should be made.

First, a general criticism of the absence of any enumerated criteria on which these powers are to be exercised should be reiterated. Secondly, the power of the Authority to dispose of any pipeline, clearly indicating that it was not intended to necessarily be the exclusive carrier of gas in the State, is again difficult to reconcile with the overriding concern of the Government for carriage of gas at minimum cost.(36) If this concern justified the establishment of the Authority in the first place, it is submitted that it should have had jurisdiction with respect to all natural gas pipelines in the

State as the concern would seem to be universally applicable. Thirdly, the reference in paragraph (c) to any pipeline "under the control of the Authority" is difficult to understand as there is no general power in the Authority to exercise regulatory control over natural gas pipelines. It may have been the intention that this phrase would cover the situation where the Authority leased a pipeline under paragraph (b), in which case any such pipeline would not, of course, be "owned by" the Authority.

The enumeration of the Authority's powers continues:(37)

> (e) purchase, take on lease, or otherwise by agreement, acquire, hold, maintain, develop and operate any natural gas storages and the necessary facilities apparatus and equipment for their operation;
>
> (f) for purposes of selling or otherwise disposing of the same, purchase or otherwise acquire and store natural gas or any derivative thereof;
>
> (g) sell or otherwise dispose of natural gas or any derivative thereof so purchased or acquired;
>
> (h) purify and process natural gas or any derivative thereof for the removal of substances forming part thereof or with which it is mixed.

At first reading, it would appear that these powers establish the Authority as a purchaser and carrier of gas which, as was mentioned earlier,(38) it was advocated that the Authority should have been. However, section 10(2)(b) provides that the Authority shall not do, or enter into

any contracts to do, any of the things referred to in these paragraphs "without the approval of the Minister given, generally or in any special case, on his being satisfied that it is necessary or desirable to do such thing in order to protect the interests of the Authority or to promote or assist in the operation of any pipeline owned by or under the control of the Authority."

Even in view of this limitation, paragraphs (e), (f), (g) and (h) might be used to establish the Authority generally as a purchaser of gas as the limitation is itself expressed in rather wide terms. For example, the Minister may give his approval "generally" if it is desirable to protect the interests of the Authority or "to promote or assist" in the operation of any pipeline owned by the Authority. If it was the intention that the Authority might be converted through the mechanism of this provision from a carrier to a purchaser of gas, it is submitted that the Act was not properly recommended to Parliament as the two roles are fundamentally different.(39) However, it does not appear to have been the intention of the then Government to so use the section.(40) Yet, that the potential has since been recognized is implicit in the following passage from the Annual Report of the Authority for 1968:(41)

> The Authority was constituted to construct and operate pipelines for the conveyance of natural gas and derivatives thereof in South Australia. *At*

> *this stage* it has no responsibility for producing, processing or selling natural gas.

In fact, the Authority continues to act as a carrier of natural gas.

The provisions of the Act dealing with disposition of any profits earned by the Authority are found in section 15:(42)

> (3) Out of any profits accrued or accruing to the Authority, the Authority may, with the approval of the Treasurer, make payments to the Electricity Trust of South Australia, to the South Australian Gas Company and to any other like authority approved for the purpose by the Minister, or to any of them, by way of rebate or drawback on charges made or being made against them, or against it, by the Authority or some other person in connection with the conveyance or supply of natural gas or any derivative thereof through any pipeline owned by or under the control of the Authority.
>
> (4) If, from any report and accounts of the Authority presented to the Minister as required by section 16 of this Act, it appears to the Treasurer that, out of the net accumulated profits of the Authority, the Authority ought to make any payments or any further payments under subsection (3) of this section, the Treasurer may appoint a committee consisting of the chairman, the Auditor-General and the Under Treasurer and call for a report and recommendations thereon from the committee and, after considering such report and recommendations, the Treasurer may require the Authority to make such payments or further payments under subsection (3) of this section out of its net accumulated profits as to him may seem proper and the Authority shall, within three months after being so required, make such payments or further payments accordingly.

The merits of this rebate procedure have been discussed earlier[43] and it remains only to add two further comments on the particular wording of subsection (3).

First, a problem of interpretation arises by the restriction of the bodies to which rebates may be paid to the two authorities enumerated and "any other *like* authority". Although payments may be made to any other authority approved for the purpose by the Minister, the use of the word "like" makes it clear that only a particular type of authority may be approved for the purpose. Indeed, even in the absence of the word "like", a reading of the words "any other authority" *ejusdem generis* with the two enumerated authorities might have imposed some restriction on the type of authority that might be approved. However, the use of the phrase "like authority" leaves no doubt and immediately raises the question of what is a like authority for the purposes of the section. If it is an authority established by Act of Parliament, as was suggested in the Parliamentary Debates,[44] it is submitted that the section is far too narrow.

Secondly, the reference in the subsection to charges made against an authority qualified under the section "by the Authority or *some other person*" requires brief explanation. These latter words were presumably intended to deal with the situat[illegible]here the producer might pay transmission charges and include these in the

price charged to the purchasing authority at the point of delivery at the City Gates.[45] In such a case, the producer would be "some other person" within the meaning of the subsection so that the Authority would be permitted to make rebates to the purchasing authority although the Authority itself would not have made the charge against the purchasing authority.

The last remaining section of the Act requiring comment is that dealing with the "common carrier"[46] obligations of the Authority but this discussion will be deferred to the next Chapter.[47]

SECTION II

THE VICTORIAN PIPELINES COMMISSION

Discussion of the Victorian Pipelines Commission is to some extent academic in view of the Commission's abolition[48] and the assumption of its responsibilities by the Gas and Fuel Corporation of Victoria.[49] However, it is interesting to compare certain aspects of the legislation with those features of the South Australian legislation just discussed.

The major reason for the establishment of the Commission was agreement by the Government with the recommendations of the Hetherington Report[50] that trunk

pipelining should be handled by third parties. The financial considerations that prompted the establishment of the Natural Gas Pipelines Authority of South Australia[51] did not dominate the debate in Victoria. Dr. Hetherington's recommendations did not extend to the establishment of a government-owned authority,[52] but the Government favoured this approach as being more in line with the Australian tradition of establishing such authorities rather than regulating public utilities in the hands of private ownership.[53]

The functions and powers of the Commission were stated in the following terms:[54]

> (1) Subject to the general direction and control of the Minister, the Commission shall administer this Act, and the object of the Commission is to provide such pipelines in Victoria as in the opinion of the Commission are desirable.
>
> (2) The Commission may, subject to this Act -
>
> (a) construct, maintain and operate pipelines for the carriage of hydrocarbons;
>
> (b) buy and sell hydrocarbons;
>
> (c) acquire by agreement any existing pipeline; and
>
> (d) do and suffer all such other acts, matters and things which are conducive to the efficient and economical use of pipelines or the efficient and economical carriage of hydrocarbons or are necessary or expedient for the performance of its functions under this Act.

A number of differences between the role of the Commission and that of the Natural Gas Pipelines Authority of South Australia will be readily apparent on the face of this section.

The most fundamental of these was, of course, the power of the Commission to buy and sell hydrocarbons. However, it is at least doubtful that the significance of this power, in terms of its potential for use as a mechanism to regulate gas prices in the State, was appreciated.

As originally submitted to Parliament, the Bill empowered the Commission to deal with both oil and gas. It was only during debate in the House of Assembly that the Government moved[55] to insert a definition of "hydrocarbons" as "hydrocarbons in a gaseous state",[56] and even then, the change was made at the suggestion of a deputation of oil company representatives.[57] This background to the restriction of the Commission's authority to natural gas suggests that its role as a buyer and seller of hydrocarbons was not properly analysed. The reasons for regulation of natural gas prices are not generally applicable to crude oil. In most jurisdictions, whatever regulation there is of oil prices is not implemented through regulation of pipelines as such because there is not, in the case of oil, the continuity of flow from point of production to point of consumption which usually dictates that a gas pipeline act as a purchaser and carrier.

Oil pipelines, as discussed earlier,[58] usually act only as carriers of oil.

Be that as it may, it clearly was intended that the Commission should act as a buyer and seller of natural gas although it does not seem to have been intended that it would do so in all cases. The Government does not seem to have been clear in its own mind as to the precise role of the Commission in this respect. In debate on the Act, the Minister for Fuel and Power said:[59]

> It is envisaged therefore that this authority ultimately will be the party which will conclude agreements with producers for the purchase of natural gas, and will sell the gas to distributing organizations, such as the Gas and Fuel Corporation, etc. as well as to large users of natural gas for industrial purposes. It will, therefore, fill the role of buying natural gas from the producers and selling it to the various retailers.

Later, in debate on an amendment proposed to remove the Commission's power to buy and sell hydrocarbons, he said:[60]

> To what extent the Commission will use it will depend on the working out of the administration but it is desired that the Commission should have the power to buy and sell hydrocarbons. This is one amendment which the oil companies submitted to me and which I refused.

Thus, there was no clear elucidation of the circumstances in which the Commission would in fact operate as a buyer and seller of gas, a fact which suggests again that its

potential role as a price regulating mechanism was not fully appreciated or perhaps intended.

The Act did contemplate, however, that the Commission would in fact exercise the role of a purchaser in some circumstances or, more accurately, recognized some situations in which it should not operate in this way. For example, it provided that the Commission should not, without consent, supply gas by retail in any area served by the Gas and Fuel Corporation or any other corporation authorized to supply gas by retail without consent.(61)

Certainly it was assumed in the course of the Parliamentary Debates that the Commission would in fact operate as a buyer and seller in some cases at least. The question arose in two contexts, the first of which was the potential role of the Commission in furthering a policy of decentralization.(62) For example, the Minister for Local Government said:(63)

> The discovery of natural gas offers to this State the greatest single incentive and boost for decentralization that it has had. We believe these industries will have their best chance of being founded in Gippsland if they can buy direct from the pipeline authority or from the producer at the lowest possible price ... The full opportunities for decentralized development will not be realised unless a disinterested authority has the role of handling the gas from the field to whatever point in the State it will best serve.

While this statement shared the same ambiguity as to whether the Commission would in fact operate as a buyer

and seller of gas, it clearly contemplated that it would do so in some cases but, again, the potential role of the Commission as a regulatory mechanism appears to have been overlooked.

Similarly, discussion of the role of the Commission as a buyer and seller of gas in the context of the question of direct sales related mainly to the impact of such activities on the position of the Gas and Fuel Corporation.(64) This question is, of course, closely related to the potential role of the Commission as an agent of decentralization but is really separate in that, even in the absence of such a policy, direct sales may be a controversial matter.(65)

Finally, it should be noted that the Act establishing the Commission contained no equivalent to section 15 of the South Australian Act(66) relating to the distribution of any profits earned by the Commission. If the Commission had operated in fact as a buyer and seller of gas it might have been expected to earn substantial profits and the Act should have given some indication of what it was intended should happen to these. As it was, it was assumed that they would find their way into the Consolidated Revenue.(67)

The Commission was abolished in 1971 for two main reasons. First, the power of the Commission to sell natural gas direct to consumers outside of existing

franchise areas had been severely restricted by the passage in 1970 of the *Gas Franchises Act 1970*(68) whereby the Gas and Fuel Corporation was given the exclusive right to supply natural gas in certain areas formerly within the exclusive domain of the Commission. Secondly, the Government considered that the cost of transporting natural gas could be more economically absorbed into the overall operations of the Gas and Fuel Corporation.(69) The Corporation itself, it should be noted in the present context is a government- owned instrumentality.

SECTION III

THE FEDERAL PIPELINE AUTHORITY

(i) Introduction:

The Federal *Pipeline Authority Act 1973*(70) differs from all State pipeline legislation in a number of important respects relating to both the form of the Act itself and the events leading to its enactment. One of the most important of these, in the context of the present study, is the fact that, alone of all the Australian Acts, it was enacted mainly as the result of a conscious policy decision to enter the field of pipeline regulation, rather than as a permissive means of enabling or encouraging pipeline construction.

It was noted earlier[71] that most of the Australian pipeline legislation was enacted as a means of permitting the construction of pipelines. The State Acts were submitted in circumstances in which particular pipeline projects were being debated and, although usually couched in terms of general application, they were necessary to permit the construction of those particular pipelines. Federal legislation, however, was not necessary to permit the construction of any pipelines, even interstate pipelines, although it would be desirable to coordinate them.

The significance of this feature of the Act is twofold. First, it suggests a Federal Government policy for the development of oil and gas pipelines on a national basis. Secondly, it suggests that, at least in the view of the Federal Government, such a policy would not be implemented through State mechanisms and it might, therefore, reasonably be supposed that the policy is different from, if not necessarily opposed to, State policies.

These considerations, in turn, raise the possibility of future constitutional conflicts over the extent of federal jurisdiction in the area. This particular aspect of the regulation of oil and gas pipelines in Australia is beyond the terms of reference of the present study and the following discussion will be restricted to an examination of the role of the Federal Pipeline Authority

as presently constituted. It will be assumed that the constitutional validity of the Act is preserved by Section 13(2) thereof.(72)

(ii) The Establishment of the Authority:

The likelihood of interstate oil and gas pipelines being constructed in Australia arose soon after the large discoveries of natural gas were made in Bass Strait in 1965. The obvious market for these reserves was the Melbourne area but the potential addition of the Sydney market was discussed almost immediately and active negotiations with the producers were pursued by the Australian Gaslight Company as Sydney's major town gas supplier.

Throughout most of the period of these negotiations, which were ultimately fruitless in any event, the Federal Government maintained a relatively low profile and, certainly, made no legislative moves with respect to the regulation of oil and gas pipelines. In 1967, the New South Wales Government introduced the *Pipelines Act*,(73) obviously in anticipation of the connection of the Sydney market to the Bass Strait reserves, as the State had at the time - and, indeed, alone of the mainland States, still has - no indigenous supplies of oil or gas which might have prompted this action. Victoria had already enacted its own *Pipelines Act*,(74) and established the Victorian Pipe-

lines Commission,[75] and it appeared that the regulation of any interstate pipeline would be left to the operation of these enactments.

The Federal Government did, however, enter the picture as the negotiations to connect the Bass Strait reserves to Sydney reached their climax towards the end of 1969 but its involvement extended mainly to the question of federal financing of the project and route selection, and not to the broader question of federal control of interstate pipelines. It may well be that it intended to legislate on the matter and that the bitter dispute[76] over its handling of the issue caused it to retreat. Whatever the reason, no legislation was presented to Parliament.

The negotiations in fact proved abortive, apparently due to the inability of the parties to agree on price, and attention soon shifted to the potential supply of the Sydney market from the Gidgealpa-Moomba fields in South Australia. It was not until after the successful completion of these later negotiations that any federal legislation appeared. There had, of course, been a change of Federal Government in the meantime.

However, before turning to a consideration of the legislation, it is interesting to reflect upon the role of the Federal Government in the negotiations to supply Sydney from the Bass Strait reserves. There can be little doubt that the absence of a federal presence

from the negotiations contributed to their failure. This is not to say that the Bass Strait fields should necessarily have been connected with the Sydney market but the fact that the negotiations were left largely to the producing and marketing companies and to two State Governments with competing interests, caused a delay of some years in the supply of the Sydney market.

The episode established clearly the need for a federal presence in the regulation of interstate trade in oil and gas, a need which was further emphasized by the Report of the Senate Select Committee on Offshore Petroleum Resources in 1971.(77) The Committee reported:(78)

> 8.104 The Committee considers that, if a need for a network of interstate pipelines is established, the Government should consider the re-establishment of the Inter-State Commission empowered to regulate the interstate transportation of oil and gas. The Committee so recommends.
>
> 8.105 Finally, the Committee believes that some form of federal control of a resource as important to Australia as petroleum, both economically and for defence purposes, is desirable. The Committee accordingly recommends that the advisory authority recommended to be established in Chapter VII, System of Administration, be also empowered to recommend the appropriate methods of transportation for petroleum and be empowered to arbitrate in disputes over the transmission interstate of petroleum products.

A reading of the *Pipeline Authority Act*(79) might suggest that the Government chose to combine, in the Pipeline

Authority itself, the two functions recommended respectively for a revived Inter-State Commission and the advisory authority. However, the subsequent establishment of the national Petroleum and Minerals Authority[80] suggests that the Pipeline Authority is intended to serve as only one part of the federal regulation of oil and gas and pipelines for the conveyance thereof. The Government also proposes to establish a national Fuel and Energy Commission which will prepare a system of energy budgeting to ensure the optimum utilization of available energy resources. The Commission will be representative of coal, petroleum, nuclear, hydro-electric and solar energy resources.[81]

(iii) The Act:

Before considering the particular functions of the Pipeline Authority, it must be noted that the operation of the Act extends to "petroleum", which is widely defined to mean any naturally occurring hydrocarbon, whether gaseous, liquid or solid, or any hydrocarbon produced by refining.[82] Clearly, therefore, it extends to both oil and gas, unlike the legislation establishing the South Australian and former Victorian authorities.[83] This wide definition of substances over which the Authority has jurisdiction is not difficult to explain in view of its intended role beyond the mere construction and operation

of pipelines but, when considered in the context of particular functions of the Authority, makes it extremely difficult to identify just what that role will emerge to be.

The functions of the Authority are:[84]

(a) to construct pipelines for the conveyance of petroleum recovered from Australian petroleum pools to centres of population and points of export with a view to the establishment of a national integrated system of such pipelines, and to maintain and operate those pipelines;

(b) to convey, through the pipes operated by the Authority, petroleum belonging to the Authority or to other persons;

(c) to buy and sell petroleum, whether in Australia or elsewhere;

(d) to ensure continuity of supplies of natural gas, that is free from impurities;

(e) to ensure that natural gas supplied by the Authority is available at a gate-valve delivery price that is, at all times, uniform throughout Australia, after making due allowances for differences in the calorific values of natural gas obtained from different sources;

(f) to ensure that condensate, petroleum gas and other substances derived from natural gas are retained and processed in Australia in order that they may be available to augment supplies of motor spirit and similar fuels obtained from indigenous sources; and

(g) to secure, control and retain reserves of petroleum adequate to meet the long term needs of the Australian people,

> and the Authority shall carry on business for the purposes of performing those functions.

It is apparent immediately from this section that the Authority is not so much a pipeline authority concerned primarily with the transmission of oil or gas but rather is a national petroleum trading company established with a statutory objects clause.

Viewed in this light, a fundamental criticism of the Act is to be found in the fact that it neither articulates any but general criteria in accordance with which the Authority is to pursue its objectives, nor does it provide any real sanctions by which interference with the pursuit of these objectives might be prevented.

So far as the pipeline related functions of the Authority are concerned, these criticisms may be of less, although still real, significance. In relation to any decision, for example, to construct a particular pipeline, the Authority is no more, but no less, handicapped than is, for example, the Natural Gas Pipelines Authority of South Australia by virtue of the absence from the latter's enabling legislation of any statement of criteria.(85) At least there are the stated criteria of establishing a "national integrated system" and ensuring a uniform delivery price for natural gas.

The absence of any sanctions is similar to the position of the South Australian Authority and may, in

relation to the construction of any *particular* pipeline, be irrelevant as a decision by the Authority to construct the pipeline would probably exclude any competitive pipeline. Furthermore, the "political clout" of the Authority would be significant in this context, as witness the fact that it apparently experienced no difficulty in its takeover of East Australian Pipeline Corporation, the subsidiary of Australian Gas Light Co. which had contracted for construction of the Gidgealpa-Moomba to Sydney gas line before the establishment of the Authority.

However, the criticism is fundamental to certain other aspects of the Authority's functions under section 13(1), particularly its role in relation to exports and in relation to securing reserves for "the long term needs of the Australian people". The balancing of interests between retaining long term reserves and permitting exports is a difficult enough task at the best of times, as the experience of the Canadian National Energy Board has demonstrated.(86) When this is to be performed in the absence of any stated criteria, it is even more complex. What, for example, are the long term needs of the Australian people for petroleum reserves and how is the Authority to secure, control and retain such reserves merely by carrying on business rather than regulating the activities of petroleum producers, other pipeline companies and marketing companies? Indeed, when section 13(1)

is read as indicating that the functions of the Authority, *inter alia*, are to carry on business for the purposes of constructing pipelines to points of export and to sell (as well as buy) petroleum in Australia *or elsewhere*, it suggests that the Authority is doomed to failure in the execution of its responsibility to protect the long term needs of the Australian people.(87)

It may be that constitutional considerations were partly responsible for the framing of section 13(1) in this form, particularly in view of the reliance in section 13(2) on the legislative power of the Commonwealth with respect to trading corporations as a constitutional foundation for the Act. However, there can be no doubt about the power of the Commonwealth with respect to the control of exports and it is submitted, therefore, that this function of the Authority ought to have been carved out and dealt with separately by means of legislation of general application regulating exports of petroleum from Australia. A trading company with jurisdiction only over petroleum resources in which it in fact trades is not an adequate mechanism for the protection of the country's long term meeds.

However, it may be too early in the history of the Authority to be conclusive on these matters as much may depend on the role which it developes for itself. In this connection it should be noted that as recently as

June, 1974, it was reported that plans for a national pipeline grid across the country "have not gone much further than the talking stage."[88] Furthermore, if the Authority is successful in negotiating for the purchase of the production of new fields, as its negotiations with the Woodside-Burmah consortium for the purchase of natural gas from fields on the northwestern Continental Shelf[89] would suggest it might be, then it may secure *de facto* control of the disposition of the country's petroleum resources. But even in this event, it is submitted that it will continue to be handicapped by the absence of any detailed statement of criteria in accordance with which it is to exercise such control.

The eventual role of the Authority will also depend in no small measure on how its operations sit with the policies of the several State Governments. It was noted earlier[90] that the exploitation of Australia's petroleum reserves will not necessarily involve the construction of interstate pipelines as there are large population centres in each of the States which has such reserves, unlike the position in Canada and, to a lesser extent the United States of America, where the larger markets are located at considerable distances from petroleum reserves. Whatever the plans of the Federal Government to pursue the development of a national integrated system of pipelines, the primary jurisdiction with respect to

pipelines may be expected to reside with the States in which most pipelines will be wholly situated to the exclusion of federal jurisdiction with respect to interstate trade and commerce. As a trading corporation, the Authority might compete with other companies and pipeline authorities in these jurisdictions but it would probably be subject to the control of the States by virtue of their ownership of petroleum resources.(91) To the extent that the functions of the Authority are rested constitutionally on the power of the Commonwealth with respect to interstate trade and commerce, they could not, by definition, be exercised so as to curtail the regulatory power of the States with respect to intrastate pipelines, or reserves of oil or gas owned by the States.

In summary, the Authority - constituted, as it is, as a statutory trading corporation(92) with power to buy and sell, but not to compulsorily acquire, hydrocarbons - will have to get oil or gas into interstate trade and commerce before the full potential of its managerial role might be fulfilled. In attempting to do this, it will apparently be subject to some extent to the control of the States through their own pipeline legislation.(93) Thus, it might be concluded that the primary jurisdiction with respect to oil and gas pipelines in Australia will continue to reside with the States unless and until the Authority is able to establish its national integrated

system. Whether it will be able to do so is far from being inevitable.

Finally, the position of the Authority in relation to the regulation of pricing should be discussed by way of comparison with the earlier examination of the South Australian Natural Gas Pipelines Authority in this respect.(94) It will be recalled that the legislation establishing that Authority appeared to be deficient in its failure to clarify the extent to which the Authority was intended to act as a revenue raising mechanism.

The position is clearer under the Federal Act in a number of respects. First, the Authority specifically has power to buy and sell hydrocarbons(95) and, therefore, can be expected to play a major role in determining prices, at least for those hydrocarbons which it in fact buys and sells. Furthermore, the Authority is under a specific statutory duty to ensure that natural gas supplied by the Authority is available at a uniform price throughout Australia.(96) Although restricted to natural gas only, this duty clearly contemplates a price adjustment role for the Authority. However, its restriction, of necessity, to natural gas "supplied by the Authority" recognizes the inherent limitations of the Authority in this respect. Finally, the Authority is under a specific duty to "pursue a policy directed towards securing revenue sufficient to meet all its expenditure properly chargeable to revenue".(97)

However, although this greater clarity may assist the Authority to some extent in its role of price determination, it is again subject to the limitation that it is only with respect to such petroleum as the Authority in fact buys and sells that its impact will be felt. The Act certainly does not establish any general federal control of petroleum pricing, even for petroleum in interstate trade and commerce.

FOOTNOTES - CHAPTER VI

(1) Act No. 7477 of 1966, repealed by the *Gas and Fuel Corporation (Pipelines) Act 1971*, Act No. 8122 of 1971.

(2) *See* further, *infra*, at pp. 208-9.

(3) Act No. 3 of 1967.

(4) Act No. 42 of 1973.

(5) *See* further, *infra*, at pp. 203-4.

(6) *See* further, *infra*, at p. 205.

(7) On July 1, 1971.

(8) *See* further, *infra*, at pp. 208-9.

(9) *See* Chapter IV, Section IV, *supra*, at pp. 135-6.

(10) *See* further, *infra*, at pp. 209-11.

(11) The benefits have been discussed, Chapter IV, Section IV, *supra*, at pp. 135-6.

(12) *See*, for example, the comments in the Parliamentary Debates on the *Natural Gas Pipelines Authority Act*, *supra* n. 3, Parliamentary Debates of South Australia, Legislative Council (hereinafter abbreviated as P.D.S.A., L.C.), March 15, 1967, at p. 3674, *per* the Hon. Sir Arthur Rymill; Parliamentary Debates of South Australia, House of Assembly (hereinafter abbreviated as P.D.S.A., H.A.), March 7, 1967, at p. 3475, *per* Mr. Jennings.

(13) Parliamentary Paper No. 102 (South Australia), *Finance for a Natural Gas Pipeline in South Australia*, (1966).

(14) *Id.*, at pp. 5-7. *See supra* n. 11.

(15) *Id.*, at p. 9, emphasis added. Although the original submission was for a direct loan from the Commonwealth, the subsequent agreement between the two Governments provided that the Commonwealth would support an application by the State to the Australian Loan Council and would provide bridging finance. *See, Agreement between the Commonwealth of Australia*

and the State of South Australia in relation to the Gidgealpa-Adelaide Natural Gas Pipeline and, for later arrangements, *see* the *Annual Report* of the Natural Gas Pipelines Authority of South Australia, 1968, at p. 2.

(16) P.D.S.A., H.A., March 7, 1967, at p. 3472.

(17) *Supra* n. 2, section 10(1). *See* further, *infra*, at pp. 201 *et seq*.

(18) *Id.*, section 15. *See* further, *infra*, at p. 202.

(19) Chapter IV, Section III, *supra*, at pp. 129-30.

(20) The Hon. Frank Walsh, P.D.S.A., H.A., February 28, 1967, at p. 3279.

(21) *Per*, the Hon. G.G. Pearson, P.D.S.A., H.A., March 7, 1967, at pp. 3451-2: "I consider that the decision to restrict the activity and power of the proposed authority merely to being a common carrier of gas from the well-head to points of consumption weakens the strength of the authority and may result in less advantageous negotiations with the producers than would have been the case had the authority been the purchaser of the gas at the well-head... I consider that, on balance, it would have been advisable to clothe the authority with the power and responsibility of buying the gas from the producer at the well-head and being in an advantageous position thereby of being a single negotiator, assuming that, as the Bill provides, there could be intervention by the Government to see fair play between two contending parties on the question of price."

(22) *Per*, Mr. Coumbe, P.D.S.A., H.A., March 7, 1967, at p. 3461. *See* also the comments of the Hon. R.C. DeGaris, Leader of the Opposition, P.D.S.A., L.C. March 14, 1967, at p. 3587.

(23) For comment on the role of this authority, *see* Chapter II, Section II(iii), at p. 26. Far from being established by "model legislation" the Company is unique in North America.

(24) *See* generally, Chapter II, Section II, *supra*, at pp. 25 *et seq*.

(25) *See* Chapter V, Section I, *supra*, at pp. 147-9; Chapter III, Part II, *supra*, at p. 83.

(26) *Supra* n. 3, section 10(1)(d) simply provides that the Authority may "make such charges and impose such fees for the conveyance or delivery of natural gas or any derivative thereof through any such pipeline as it may, with the approval of the Minister, determine".

(27) *Id.*, sections 15(3) and (4) simply provide that the Authority may, or may be required to, make payments out of any profits, with the approval of the Treasurer, to the Electricity Trust of South Australia, the South Australian Gas Company and "any other like authority approved for the purpose by the Minister". *See* further, *infra*, at pp. 201-3.

(28) *Supra* n. 3, section 4(2).

(29) *Id.*, section 4(4).

(30) *Supra*, at pp. 192 *et seq.*

(31) *Supra* n. 3, section 4(4)(d).

(32) *Id.*, section 3(1), emphasis added.

(33) *Id.*, section 13. *See* further, Chapter VII, *infra*, at pp. 235-7.

(34) *Per* the Hon. Sir Thomas Playford, P.D.S.A., H.A., March 8, 1967, at pp. 3535-6: "The amendment ensures that licences will be granted unless reason exists why they should not be granted. The legislation should be administered on the basis that the pipeline authority is defined as a common carrier. In years to come there is not the slightest doubt that there will not be two but many producers of natural gas... ."

(35) *Supra* n. 3, section 10(1).

(36) *See supra*, at pp. 190-1.

(37) *Supra* n. 3, section 10(1).

(38) *Supra*, at p. 193.

(39) *See* generally, Chapter IV, Section II, *supra*, at pp. 113-4.

(40) "It is not intended that, in the ordinary course, the authority would exercise any of the powers referred to in those paragraphs. However, the situation could arise when some such action may be necessary to

protect the interests of the authority and to ensure that the assets of the authority are protected and used in the best interests of the public". *Per* the Hon. Frank Walsh, Premier, P.D.S.A., H.A., February 28, 1967, at p. 3278. What "situation" was not suggested and, indeed, is difficult to imagine.

(41) *Annual Report* of the Natural Gas Pipelines Authority of South Australia, 1968, at p. 2, emphasis added. The statement was repeated in the *Annual Report* of the Authority for 1970.

(42) *Supra* n. 3.

(43) *Supra*, at p. 192.

(44) "I agree that it is proper that rebates, if any, should be made, but I believe that they should be made on an equitable basis to all consumers, and not merely one or two... . A like authority would be one authorized by Act of Parliament, and it could not mean anything else. That means that the company at Angaston, which is cited as being a user of the gas, could not in my view, under this clause, benefit from any of the rebates made out of the profits of the pipeline authority. I hope hundreds of other organizations will be users of natural gas, some of them small and deserving every bit of help that Parliament can give them. They for their part will be obliged to go to the producer and endeavour to negotiate a contract for supply. At that point such organizations will be at a disadvantage in regard to the larger consumer, and will undoubtedly pay a higher price. However, they are contributing to the use of the pipeline and, therefore, to any profits the authority may make, but they are not entitled to a rebate. In other words, the authority's profits are obtained from every consumer of natural gas but are rebated only to two or three. The small man will be loaded for the benefit of the big consumer. There is no reason why the clause should be restricted. Every person who contracts with the authority for the transmission or conveyance of the gas to any particular point of consumption should be entitled to a pro rata benefit out of any profits made." *Per* the Hon. G.G. Pearson, P.D.S.A., H.A., March 7, 1967, at p. 3453.

(45) The contract between the producers, Delhi-Santos, and the South Australian Gas Company, provides for delivery by the producers at the City Gates. *See*

The Journal of Industry, Natural Gas Issue, November 1969, at pp. 5-6.

(46) *Supra* n. 3, section 13.

(47) *Supra* n. 33.

(48) The Commission commenced operations on March 1, 1967, and ceased on July 1, 1971.

(49) The *Gas and Fuel Corporation (Pipelines) Act 1971*, Act No. 8122.

(50) Hetherington, *The Orderly Development of Petroleum in Victoria*, a Report to the Premier of Victoria, March, 1966.

(51) *Supra*, at p. 190.

(52) The Report first recommended the establishment of a government sponsored private gas trunk pipeline company along the lines of the Alberta Gas Trunk Line Company with ownership shared among producers, distributors, interstate pipelines and the general public. In the event that this approach did not find favour, the Report recommended that trunk pipelining be handled by the Ministry of Fuel and Power "for the principal reason of leaving the prospect for there to be more than one gas purchaser of Victorian gas." *Loc. cit.*, *supra* n. 50, at pp. 11-5 to 11-6.

(53) "The Government rejected the notion of a private pipeline organization which was Dr. Hetherington's recommendation for two compelling reasons. The first was that all the expert advice and experience from overseas indicate that if the full potential market of natural gas is to be achieved, it has to be transported to the consumer at the lowest possible price. The second reason is that in most countries public utilities operate under some form of regulation. In Australia, on the other hand, we have tended to adopt a different form of control, the formation of semi-governmental authorities operating under Acts of Parliament responsible to a Minister and supervised by Parliament. There are more than 100 such bodies in Victoria and this therefore seemed to be a preferable form of organization to private pipeline companies." *Per* the Hon. R.J. Hamer, Minister for Local Government, Victorian Parliamentary Debates, Legislative Council (hereinafter abbreviated as V.P.D., L.C.), November 23, 1966, at pp. 2022-23.

(54) *Supra* n. 1, section 11.

(55) Victorian Parliamentary Debates, House of Assembly (hereinafter abbreviated as V.P.D.,H.A.), November 17, 1966, at p. 1899.

(56) *Supra* n. 1, section 2.

(57) *Loc. cit., supra* n. 55.

(58) Chapter II, Section II(i), *supra*, at p. 20.

(59) *Per* G.O. Reid, V.P.D., H.A., October 25, 1966, at pp. 1215-16.

(60) V.P.D., H.A., November 17, 1966, at p. 1899.

(61) *Supra* n. 1, section 11(5).

(62) *See* Chapter IV, Section III(ii), *supra*, pp. 120-1 and *infra* n. 63.

(63) The Hon. R.J. Hamer, V.P.D., L.C., November 23, 1966, at p. 2024. On the role of the supply of natural gas in pursuing a policy of decentralization generally, *see* also the following comments: V.P.D., H.A., November 16, 1966, at pp. 1822-3; V.P.D., L.C., November 29, 1966, at pp. 2256, 2258.

(64) "We do not know to what group or groups the Pipelines Commission will sell directly but if, as had been hinted in the Hetherington Report and by various remarks in the Press, the Commission has the right to sell to the large industries of this State, then the Gas and Fuel Corporation is to be deprived of this most lucrative market and consequently householders will have to pay more for their gas to offset the subsequent loss to the [Gas and Fuel] Corporation." *Per* the Hon. I.R. Cathie, V.P.D., L.C., November 29, 1966, at p. 2242.

(65) The Hetherington Report, *supra* n. 50, at pp. 6-6 to 6-7, commented on the subject as follows: "Certainly within their areas of reticulation the gas distributing companies should have an exclusive franchise since it is uneconomic and inconvenient to have duplication of gas mains in city streets and since profit on industrial sales can benefit the public gas user. In the case of industries outside existing reticulation systems or outside the reasonable expansion of such reticulation systems there may be

large industries requiring a gas supply... The question arises as to whether such industries can best be supplied by a distribution company or the trunk pipeline... In the United States third party trunk pipelines make direct sales. Such direct sales are less common in Canada. In the United States direct sales are not regulated as a part of the rate regulation of interstate pipelines and thus constitute an attractive market for a trunk pipeline. On the other hand gas distributing companies prefer to make these sales in order to spread costs over a larger volume of gas. Frequent complaints of unfair loading of costs on the general customer has prompted requests for protective legislation and the Federal Power Commission of the United States is asking for jurisdiction over such sales to eliminate the task of attempting to allocate costs between regulated and unregulated sales. To say the least the principle of direct sales in the United States has created a long standing controversy.

Sales of fuel to large industries require special considerations for each industry and it could be argued that a gas distributor might not be able to obtain industrial business or induce the location of a new industry through not being able to provide gas on terms desired by the customer under a system of uniform rate schedules. There is no basic reason why a gas distribution company should not sell industrial gas under individual contracts (as versus uniform rate schedules) just as a trunk pipeline would do, particularly if sales were subject to approval. Gas distributors in Alberta are doing just this in order to capture industrial markets and to induce new industry to locate in the province.

Many factors are involved in this consideration and it might be well to leave the handling of direct industrial sales subject to the approval of the Minister of Fuel and Power in each specific instance."

(66) *Supra*, at pp. 201-3.

(67) *See*, for example, the comments of the Hon. P.V. Feltham, V.P.D., L.C., November 29, 1966, at p. 2260.

(68) Act No. 8057 of 1970.

(69) The reasons were recently elaborated upon as follows:

"1. It had always been a long term objective of the

Victorian Government for the Corporation to be established in its originally intended form i.e. the sole distributor of gas throughout Victoria. In 1966 the Corporation was not ready to assume the responsibility of building a major gas trunkline in Victoria for the development of natural gas. However by 1971 the position had changed considerably and the Corporation, with changes of structure and management, together with expertise gained, was by then in a position to take over the whole distribution of natural gas in the State.

2. The separate gas transmission tariffs which attain when there are more than one pipeline system operating in a state can often mitigate against the finalisation of contracts for bulk supplies of industrial gas such as to cement works, alumina smelters, iron foundries etc. For this reason it was felt that the transmission cost of gas should become an integral part of the contract price and this was better able to be achieved by a single organisation than several separate ones. This course has proven to be true in practice and the Corporation has proved to be a very successful marketer of natural gas with over a 30% annual sales growth factor occurring during the past five years.

3. Administratively it was considered that a Pipelines Commission, being only a small organisation and without the expertise of marketing and servicing, was not really necessary and that the overall role of gas distribution and marketing could be best achieved by a single authority which the State had already established for the purpose." Letter to the candidate from M.A. Stratton, Executive Officer, Victorian Ministry of Fuel and Power, December 6, 1974.

(70) *Supra* n. 4.

(71) Chapter IV, Section II, *supra*, at pp. 108-9.

(72) *Supra* n. 4. The section is in the following terms: "The Authority may perform its functions to the extent that they are not in excess of the functions that may be conferred on the Authority by virtue of any of the legislative powers of the Commonwealth, including the power of the Parliament to make laws with respect to trading corporations formed within the limits of the Commonwealth and, in particular,

may perform its functions -

(a) in a Territory;

(b) by way of, or so as to facilitate, trade and commerce with other countries, among the States, between territories or between a Territory and a State;

(c) for the purpose of ensuring the availability, where a state of war, or danger of war, exists, of petroleum in each State and Territory for use for the purposes of the defence of Australia; or

(d) in respect of matters incidental or related to the performance of its functions in accordance with paragraph (a), (b) or (c)."

(73) Act No. 90 of 1967.

(74) Act No. 7541 of 1967.

(75) *Supra*, at pp. 203 *et seq.*

(76) Typical of Press comment at the time was the following editorial in the *Sun*, December 31, 1969: "Did Mr. Gorton learn anything from his Government's near-defeat two months ago? If he did he has forgotten it already. It is hard to imagine more hamfisted unwarranted interference than the Commonwealth's intrusion into the proposed route of the Melbourne-Sydney natural gas line. The route is the exclusive business of the States of Victoria and New South Wales. Yet even without consulting the States a Federal Minister announces the Commonwealth would not subsidise the greater cost of an inland route. Not only have the States not chosen a route but they did not request a Commonwealth subsidy. To complete the insult the announcement came from a Minister who has nothing to do with fuel and power in the Commonwealth field. In tramping over the States on the pipeline route the Commonwealth Government is tramping on its own windpipe. Someone should have given the Commonwealth its very own pipeline for Christmas - a pipeline to the people."

(77) *Off-Shore Petroleum Resources*, the Report of the Senate Select Committee on Off-Shore Petroleum Resources, 1971.

(78) *Id.*, at p. 296. The Inter-State Commission referred to in the recommendation was modelled on the U.S. Interstate Commerce Commission. Its demise, after a High Court decision in 1915 limiting its powers to adjudicating matters of fact, is discussed in the Senate Report, *supra* n. 77, at pp. 291-5.

(79) *Supra* n. 4.

(80) The *Petroleum and Minerals Authority Act 1973*, Act No. 43 of 1974, assented to on August 8, 1974, appears to confuse the role of the Pipeline Authority as it empowers the Petroleum and Minerals Authority, *inter alia*, to buy and sell and to transport hydrocarbons. *See* section 6.

(81) Letter to the candidate from R.N. Townsend, Acting Secretary, Commonwealth Department of Minerals and Energy, September 18, 1974.

(82) *Supra* n. 4, section 3(1).

(83) *Supra* at pp. 187-8. Indeed, the definition appears to extend even to coal. However, what was probably an unintended limitation to the definition appears to have been imposed by part of the wording of paragraph (d) of the definition of petroleum in section 3(1). It defines petroleum to mean "any hydrocarbon or mixture of hydrocarbons produced by the refining of a substance referred to in paragraph (a), (b) or (c)." One non-hydrocarbon "substance" referred to in paragraph (c) is hydrogen sulphide. Sulphur, although produced by the refining of this "substance", is not "any hydrocarbon" and, therefore, would appear to be beyond the powers of the Authority.

(84) *Supra* n. 4, section 13(1).

(85) *Supra*, at p. 198.

(86) *See*, for example, McDougall, *The Canadian National Energy Board: Economic Jurisprudence in the National Interest or Symbolic Reassurance?*, 11 Alta. L. Rev. 327 (1973).

(87) This criticism is given added cogency by some of the comments in the Parliamentary Debates on the legislation suggesting a liberal export policy. *See* for example, *per* Mr. Kerin, Commonwealth Parliamentary Debates, House of Representatives, May 16, 1973, at p. 2191: "It is clear that Australia and Canada will be heavily involved in the requirements of the

United States and Japan. There is a case to say that Australia and Canada cannot be too unwilling or indecisive about supplying natural energy resources because their very lucrative markets may be lost to more agreeable energy resource suppliers, to new energy technology or to energy rationing programs and these markets may be hard to redeem."

(88) *The Oil and Gas Journal*, June 10, 1974, at p. 106.

(89) *Id.*

(90) Chapter IV, Section II, *supra*, at pp. 110-11.

(91) In *Huddart Parker & Co. Pty. Ltd. v. Moorehead*, (1908) 8 C.L.R. 330, at p. 413, Higgins J. described the power of the Commonwealth with respect to "Foreign Corporations, and trading or financial corporations formed within the limits of the Commonwealth", under section 51 (xx) of the Australian Constitution, in the following terms: "There is power in sub-section (i) to make laws 'with respect to' a certain number of actions and transactions - interstate and foreign trade. There is power under subsection (xx) to make laws 'with respect to' certain actors - to wit, corporations. The Federal Parliament has no power, in regulating the actors, to regulate, in whole or in part, transactions which do not belong to inter-State or foreign trade."

(92) *Supra*, at p. 216.

(93) *Supra* n. 91.

(94) *Supra*, at p. 192.

(95) *Supra* n. 4, section 13(1)(c). *See supra*, at pp. 214 *et seq.*

(96) *Id.*, section 13(1)(e). *See supra*, at p. 216.

(97) *Id.*, section 28. Under section 30(2), any profits [illegible] to be applied in such manner as the Minister, [illegible]h the concurrence of the Treasurer, determines.

CHAPTER VII

COMMON CARRIER PROVISIONS

It will be apparent from the discussion in the preceding two Chapters that little attention has been paid in the Australian pipeline legislation to dealing with many of the abuses demonstrated in the American experience.(1) Some features of the legislation may be regarded as being concerned indirectly with those issues, such as, for example, the provisions controlling entry into the pipeline business in that they could be used to control monopolistic tendencies to some extent. But, with one exception, no provision of the legislation confronts directly the issues of denial of independent access,(2) inequality of competition(3) and creation of monopolies.(4)

The one exception is that all the State pipeline legislation contains provisions designed to protect outsider access to the use of pipeline facilities. At the federal level, an attempt to impose common carrier status on the Pipeline Authority was made during passage of the Act through Parliament but was rejected by the Government.(5) In all cases, it appears that such provisions were seen as the great protector of fair play in pipeline use and they will, therefore, be examined in some detail.

SECTION I

THE STATUTORY PROVISIONS

(i) The Common Carrier Provisions:

None of the Acts unconditionally imposes common carrier status on pipelines *ab initio*. The Queensland *Petroleum Acts* provide that the Governor in Council may, at any time during the currency of a license declare that such license shall be subject to the express condition "that the licensee will accept and discharge the obligations of a common carrier, and, to that extent, will transport for hire by means of the pipeline concerned petroleum the property of any other person or persons."(6) This is the only provision in any of the Acts which unconditionally imposes common carrier status, but only after order by the Governor. This is not to suggest by any means that the provision is ineffective by virtue of this fact. Indeed, its effect may well be to encourage "free" negotiation of independent access under threat of having common carrier status imposed, a favourite device in the Alberta petroleum legislation, as noted earlier.(7)

The *Natural Gas Pipelines Authority Act* of South Australia appears, in some respects, to impose common carrier obligations on the Authority. It provides that the Authority shall convey natural gas, or any derivative

thereof, if required to do so by any producer, purchaser or gas supplier upon such terms and conditions as are agreed upon or, in default of agreement, as are determined by the Minister.(8) However, an important qualification is introduced by virtue of the fact that the Authority is only under such obligation "to the extent that it is not precluded from doing so by reason of any existing and accruing liabilities and obligations of the Authority under any agreement or otherwise for the conveyance through the pipeline of natural gas or any derivative thereof."(9)

It is submitted that the effect of this limitation is to statutorily entrench the rights of existing users of the pipeline to the exclusion of independent access. In effect, it provides that the Authority shall *not* be a common carrier. Presumably, no particular gas pipeline would be constructed by the Authority unless contracts for the supply of gas to the capacity of the line had been entered into or, at least, were being negotiated. The limitation to the section means that all subsequent discoverers would thereby be precluded from use of the line. Indeed, the Government virtually admitted as much, despite its claims that the provisions of section 13 "equate the Authority, as far as is practicable, to a common carrier of gas through its pipeline."(10) The Premier said:(11)

> If additional discoveries were made between Moomba and Adelaide, I cannot see how any more gas could be conveyed

> if the people already providing gas were keeping the pipeline full.

The Opposition spokesman, justifiably, responded that the legislation established the Authority as a "common carrier for one company".(12)

The former Victorian Pipelines Commission was under an absolute obligation to act as a common carrier of hydrocarbons.(13) However, the present position is not clear. The Act abolishing the Commission provides on the one hand that the Gas and Fuel Corporation, as the successor to the Commission, has imposed upon it "obligations previously imposed upon the Commission".(14) On the other hand, the *Victorian Pipelines Commission Act* is repealed by the same Act.(15)

There is no obligation imposed on the federal Pipeline Authority to act as a common carrier. During passage of the Act(16) through Parliament, the Senate adopted an amendment deeming the Authority to be a common carrier,(17) but this was rejected by the House of Assembly.(18) Interestingly, the proposed amendment even if it had been adopted may have been subject to the same criticism levelled at section 13 of the *Natural Gas Pipelines Authority Act* of South Australia(19) in that it provided that the Authority was to be under an obligation to accept petroleum at any point on its pipelines "subject to the capacity of its pipelines."(20) While these words are in no way as detailed as those of the objectionable

limitation in the South Australian Act, they may have raised the question of whether they meant capacity remaining after existing obligations were met, which would be minimal or non-existent,(21) or total capacity in which case the obligation would require ratable reduction of deliveries under existing commitments.

(ii) Provisions for Directions to Convey:

The remaining Acts all contain provisions for procedures whereby pipeline operators may be directed to carry oil or natural gas in particular cases. For example, the *Pipelines Act* of Victoria provides:(22)

> 17.(1) A permittee may enter into an agreement with any person for or in relation to the conveying by the permittee by means of the pipeline of anything belonging to that person which is authorized to be conveyed through the pipeline.
>
> (2) The terms of any agreement so entered into shall not contravene the provisions of this Act or the regulations or the terms of the permit granted or licence issued under this Act in respect of that pipeline.
>
> (3) Where -
>
> (a) the person seeking the agreement is aggrieved by the failure of the permittee to agree on any matter concerning the conveyance by means of the pipeline of the said thing belonging to that person; or
>
> (b) a person entitled to have anything conveyed through the pipe-

> line pursuant to any previous agreement or any direction of the Minister under this section is aggrieved by the making of the agreement -
>
> the person so aggrieved may on payment of the prescribed fee apply in writing to the Minister for a direction under this section.
>
> (4) After consulting the Minister of Mines and considering the application and any other matter that he considers relevant the Minister may -
>
> (a) direct the permittee to convey by means of the pipeline the whole or any specific part of the thing so sought to be conveyed upon such terms and conditions (including the rate of payment) as the permittee and the person seeking the conveyance of the thing may agree or, in default of such agreement, as the Minister determines; or
>
> (b) direct the permittee not to convey the thing through the pipeline.
>
> (5) Failure by the permittee to comply with any direction given under this section shall be an offence against this Act.

Although they vary in details and procedures, the basic approach of the other Acts is similar.(23)

The Western Australian Act, however, contains an important limitation which may negative the beneficial aspects of the procedure. It provides that any direction "shall be subject to the licensee's right to convey its own petroleum through the pipeline in priority to any other petroleum to be so conveyed."(24) Thus, in precisely

those sorts of cases in which denial of independent access has proven a problem in the United States of America, *viz.*, where pipelines are owned by producers or refiners competing with the independent seeking access, the pipeline operator is protected unless he has excess capacity in the line which is unlikely, again for reasons similar to those discussed earlier in relation to the South Australian Natural Gas Pipelines Authority.(25) In the case of any independent pipelines operating as carriers only and not owning the petroleum they convey, the pipeline presumably would be "glad of the business" and would not need to be directed to carry for "outsiders". It is submitted that the limitation makes the protection of the section largely illusory.

Finally, it might be noted in relation to the "provisions for directions" approach that it is similar to the approach discussed in relation to common carrier provisions in Queensland and Alberta(26) in that the potential use of such provisions may encourage free negotiation of access for independents without government intervention.

SECTION II

ASSESSMENT

(i) "True" Common Carrier Provisions:

It was suggested in Chapter IV that the history of abuse of pipeline control in the United States is not likely to repeat itself in Australia.(27) However, the potential for abuse is always present by virtue of the nature of the industry and, therefore, precautions, designed to prevent such abuses even being considered, should be taken. One such precaution obviously is to protect access to pipelines.

However, it is submitted that the general imposition of common carrier status on pipelines is not the appropriate procedure to accomplish this in the Australian context. In fact, as has just been seen, none of the Australian Acts adopts this approach unconditionally but it is clear from the Parliamentary Debates in all jurisdictions that the concept was considered by many to provide a proper and appropriate mechanism and its validity should therefore be examined.

A major objection to the general imposition of common carrier obligations is the inflexibility which it produces. The common carrier must carry for one and all(28) and, therefore, any control over attaching priorities

to the exploitation of particular reserves, at least through the mechanism of pipeline regulation, is lost where common carrier status is imposed. It was suggested in Chapter IV that such considerations should be fundamental to the regulation of pipelines.(29) It is submitted that the general imposition of common carrier obligations on pipelines is contrary to the approach suggested there.

In any event, it is submitted that, for reasons discussed below,(30) the concept is inappropriate for government-owned and operated pipelines.

(ii) The "Directions to Convey" Approach:

It is submitted that the approach adopted in most of the Australian Acts of providing a procedure whereby pipelines may be directed to carry for outside shippers is the better mechanism. Most importantly, it permits flexibility within which particular applications can be considered on a case by case basis in the context of the general concerns about priorities to be given to exploitation of reserves, as discussed earlier.(31) Obviously however, limitations such as those found in the Western Australian Act(32) should not be a feature of such provisions.

(iii) Common Carrier without Common Purchaser:

The examination of the American history in Chapter III demonstrated that denial of access to pipelines is only one aspect of the problems faced by independent producers in that jurisdiction.(33) In particular, the question was raised as to the effectiveness of protecting access to pipelines for independent producers if they were denied access to *markets*.(34) Obviously, the need to protect independent access to pipelines only arises if there is independent access to markets.

The Alberta legislation recognizes this aspect of the problem by providing, along with its provisions whereby a pipeline may be declared to be a common carrier,(35) that a purchaser may be declared to be a common purchaser from designated pools.(36) Each common purchaser is then under an obligation to purchase oil or gas offered to him "without discrimination in favour of one producer or owner as against another in the same pool", without discrimination between any pools designated in the declaration and without discrimination in favour of any production in which he has any interest. Furthermore, the owner or operator of a gas processing plant may be declared to be a common processor of gas in which case he is obliged to process gas "which may be made available for processing in his plant without discrimination".(37) These powers are in fact rarely used but their potential

use undoubtedly discourages pipelines, purchasers and processors from adopting discriminatory practices.

Similar powers should be included in the Australian legislation for, in their absence, provisions for common carrier obligations or directions to convey may provide only illusory protection. If interference with the forces of the free market is justified to the extent of requiring pipelines to convey outside oil and gas in particular cases, it is equally justified to require purchasing and processing. Indeed, the former may be useless without the latter. However, for similar reasons to those discussed in relation to the relative merits of the common carrier and directions to convey approaches,(38) it is submitted that the powers should be drafted in the form of directions to purchase and directions to process rather than in the particular form of the Alberta precedent.

(iv) Application to Government Pipelines:

In rejecting the Senate amendment to the federal *Pipeline Authority Act*,(39) attempting to deem the Authority to be a common carrier,(40) the House of Representatives gave the following reasons, in part:(41)

> Clause 16A would reduce the Pipeline Authority to the status of a common carrier, and substitute public investment for what would otherwise be a substantial private obligation to invest in its own pipeline. The Senate amendment, imposing the obligation on the Authority to accept petroleum at

> any point on its pipelines, for delivery to any other point on such pipelines, would completely frustrate operation of the pipeline by the Pipeline Authority, and in particular its powers under clause 13 to buy and sell natural gas on its own account.
>
> The objective of the Government is to establish a national pipeline grid for the transmission of gas at a uniform price, and ensuring continuity of supply. Each Australian producer of natural gas claiming its rights from the Pipeline Authority as a common carrier could set up a rival and excessive pricing structure, according to its whim and belief as to what maximum returns it could obtain.

It is submitted that these reasons are legitimate in the particular context of the federal legislation but, more importantly, they suggest a broader rejection of the application of common carrier principles to government pipeline authorities.

Common carrier status for a particular instrumentality is incompatible with the exercise by that instrumentality of regulatory functions, particularly, as the reasons above show, in relation to pricing. Therefore, it is submitted that the former Victorian Pipelines Commission should not have been established as a common carrier.(42) Nor should the Natural Gas Pipelines Authority of South Australia have such status imposed upon it. It has been seen that the particular provisions of the South Australian Act probably do not achieve this in any event,(43) but the objection should be that the present provisions be

repealed rather than that they be clarified to impose common carrier status. It is true that the South Australian Authority does not directly function as a price regulator with a power to buy and sell natural gas but, as discussed earlier,(44) it clearly plays an indirect role in the pricing process and in determining government take from the exploitation of South Australian gas reserves. Any obligation to carry gas for outside parties on a common carrier basis is inconsistent with these aspects of its responsibilities.

However, it may be that some form of a power to direct government authorities to convey particular shipments of oil or gas, as found under the other Australian pipeline legislation, might be considered. The considerations discussed in relation to imposing common carrier status on government pipelines would not apply with equal force to such an approach as the question of whether any particular direction would interfere with the authority's other responsibilities could be considered in deciding to give or refuse the direction. It is submitted that the question of applying the directions to convey approach to government pipeline authorities is really one of deciding the extent to which the authority is to be independent of government influence in the execution of its responsibilities.

FOOTNOTES - CHAPTER VII

(1) Chapter III, Part I, Section II, *supra*, at pp. 45 *et seq.*

(2) *Id.*, Section II(i), *supra*, at pp. 47 *et seq.*

(3) *Id.*, Section II(ii), *supra*, at pp. 51 *et seq.*

(4) *Id.*, Section II(iii), *supra*, at pp. 54 *et seq.*

(5) *Infra*, at pp. 244 *et seq.*

(6) The *Petroleum Acts, 1923-1967*, as amended by the *Petroleum Acts Amendment Act of 1962*, Act No. 30 of 1962, section 45(3)(b).

(7) Chapter III, Part II, Section I, *supra*, at pp. 78-9.

(8) The *Natural Gas Pipelines Authority Act*, Act No. 3 of 1967, section 13.

(9) *Id.*

(10) *Per* the Hon. Frank Walsh, Premier, Parliamentary Debates of South Australia, House of Assembly (hereinafter abbreviated as P.D.S.A., H.A.), February 28, 1967, at p. 3278.

(11) *Per* the Hon. Frank Walsh, Premier, P.D.S.A., H.A., March 8, 1967, at p. 3536.

(12) *Per* Mr. Shannon, P.D.S.A., H.A., March 8, 1967, at pp. 3536-8.

(13) *Victoria Pipelines Commission Act 1966*, Act No. 7477 of 1966, repealed by the *Gas and Fuel Corporation (Pipelines) Act 1971*, Act No. 8122 of 1971, section 11(3): "Subject to this Act the Commission shall act as a common carrier of hydrocarbons."

(14) The *Gas and Fuel Corporation (Pipelines) Act 1971*, *supra* n. 13, section 3(b).

(15) *Id.*, section 7,

(16) The *Pipeline Authority Act 1973*, Act No. 42 of 1973.

(17) Commonwealth Parliamentary Debates, Senate (herein-

after abbreviated as C.P.D., Senate), May 24, 1973, at pp. 1931 *et seq.*

(18) For the reasons, *see infra*, at pp. 244-5.

(19) *Supra*, at pp. 235-6.

(20) *Supra* n. 17.

(21) For the reasons discussed in relation to the *Natural Gas Pipelines Authority Act* of South Australia, see *supra*, at p. 236.

(22) The *Pipelines Act 1967*, Act No. 7541 of 1967, section 17.

(23) South Australia, *Mining (Petroleum) Act 1940-67*, particularly as amended by the *Mining (Petroleum) Act Amendment Act, 1967*, Act No. 75 of 1967, section 80L; Western Australia, the *Petroleum Pipelines Act, 1969*, Act No. 112 of 1969, section 21; New South Wales, the *Pipelines Act, 1967*, Act No. 90 of 1967, section 23.

(24) *Supra* n. 23, section 21(5).

(25) *Supra*, at p. 236.

(26) *Supra*, at p. 235.

(27) Chapter IV, Section II(v), at p. 112.

(28) In *Niagara v. Cordes*, 62 U.S. 7(1858), the U.S. Supreme Court said: "A Common carrier is one who undertakes for hire to transport the goods of those who may choose to employ him from place to place. He is, in general, bound to take the goods of all who offer ...." *See* generally, Gorton, *The Concept of the Common Carrier in Anglo-American Law* (1971).

(29) Chapter IV, Section III(i), *supra*, at pp. 114 *et seq.*

(30) *Infra*, at pp. 244 *et seq.*

(31) *Supra* n. 29.

(32) *Supra*, at pp. 239-40.

(33) Chapter III, Part I, Section II, *supra*, at pp. 45 *et seq.*

(34) *Id.*, Section II(i), supra, at pp. 50-1.

(35) The *Oil and Gas Conservation Act*, R.S.A. 1970, c. 267, sections 49 and 50.

(36) *Id.*, sections 51 to 53.

(37) *Id.*, sections 54 and 55.

(38) *Supra*, at p. 242.

(39) *Supra* n. 16.

(40) *Supra*, at p. 237.

(41) C.P.D., Senate, May 31, 1973, at p. 2202.

(42) *Supra*, at p. 237.

(43) *Supra*, at pp. 235-6.

(44) Chapter VI, Section I, *supra*, at pp. 191-2.

CHAPTER VIII

CONCLUSIONS

The aim of this study has been to identify the major issues involved in the regulation of oil and gas pipelines in Australia and with which it would be expected that the Australian pipeline legislation should deal. This process of identification has been undertaken in the context of the construction and operational techniques employed by the industry, in the light of the histories of the regulation of the industry in the United States of America and Canada and, generally, in terms of the Australian setting. The existing Australian legislation has been examined with a view to assessing the extent to which it does in fact deal with what are submitted to be the major issues. Conclusions on particular aspects of these issues, and on the effectiveness of the existing legislation in dealing with them, have already been drawn during the course of the foregoing discussion and it remains only to summarize them generally in the context of the overall study.

In Chapter IV, the major issues involved in the regulation of oil and gas pipelines in Australia were discussed under seven headings.(1)

In relation to the first three of these - the

control of entry into the pipeline business in terms of the commitment of reserves to markets,[2] decentralization[3] and the question of who should build pipelines[4] - it is submitted that the existing legislation is generally inadequate. All three are really aspects of the control of entry into the pipeline business and the legislation addresses itself to this only to the extent of requiring pipelines to be licensed and not in terms of what have been submitted are the real issues involved in any decision to construct oil or gas pipelines.

It is a failing which could be easily remedied by the legislative statement of criteria in accordance with which entry should be controlled. It is readily acknowledged that phrases such as "the public interest" or "public convenience and necessity" are in many respects hollow platitudes. Their mere statement does not resolve any questions but it is submitted that it does establish that the issues involved go beyond a question of merely licensing an activity. Furthermore, there is of course no reason why criteria should be stated only in such broad terms.

The criticism, it is submitted, may be of equal validity as applied to government-owned pipeline authorities. While there is undoubtedly a difference between regulating an activity and undertaking that same activity directly (a difference which perhaps has not been fully

appreciated as applied to pipelines in Australia to date), the same issues arise, but for determination by a different instrumentality and at different stages. Again, a statement of appropriate criteria may at least serve to identify those issues.

A question related to that of merely licensing pipelines without reference to the issues involved in that process arises from the different considerations involved in the regulation of oil pipelines, on the one hand, and natural gas pipelines, on the other hand. These differences stem mainly from the differences in the methods of operation of each but they go beyond technical questions to fundamental issues of energy policy, particularly in relation to the question of committing reserves to markets. They are differences which, it is submitted, have not been appreciated by the framers of the Australian legislation, as witness the fact that, with the exception of the operation of gas pipelines by government-owned authorities in Victoria and South Australia, both oil and gas pipelines are regulated on the same terms and without distinction between the two. This is not to suggest that gas pipelines must operate in the way in which they have historically, nor that separate regulatory structures are required for each form of petroleum transportation. The two may be quite satisfactorily regulated by the same mechanism, but it is submitted that an appreciation of

the different considerations raised by each is fundamental to a proper resolution of the issues involved in regulation. The broad issues may be the same in each case but the different considerations may require different solutions to those issues.

The next issue identified in Chapter IV was that of controlling pipeline charges for the transportation of petroleum.(5) There are really two aspects to this issue. The first relates to the basis on which pipelines should charge for their services. Again, the Australian legislation does not address itself to this question. It is perhaps understandable that the question would not have arisen under the general pipeline legislation but, in relation to the legislation establishing the government-owned authorities, some directives as to the basis on which these authorities were to approach the determination of pipeline charges should have been included.

The second aspect of controlling pipeline charges arises in the context of regulating competitive abuses and, similarly, has not been considered in the legislation. As a minimum, it is submitted, the legislation should provide for the filing of pipeline tariffs and, furthermore, should establish a system of administrative review for ensuring that these are just and reasonable.

The broad issue of controlling competitive

abuses[6] generally has been dealt with through the mechanism of providing that directions to convey may be given to pipeline licensees. It is submitted that this procedure is a most desirable one, subject, however, to the qualification that it should be extended from mere conveyance to processing and purchasing.

The last two issues of pollution control and safety[7] and expropriation[8] have been specifically dealt with in the pipeline legislation and the provisions relating to them are generally satisfactory.

In Chapter V, the alternative approaches to the application of pipeline legislation were discussed.[9] While the matters discussed there were not listed separately as one of the major issues with which the pipeline legislation should deal, it is submitted that they raise an overall consideration within which the other, specifically enumerated issues might be embraced. That overall consideration is the role of pipeline regulation in the broader context of energy regulation and from it stems the most important conclusion of the study. It is, in a sentence, that the Australian pipeline legislation deals with oil and gas pipelines in isolation from, and in ignorance of, their function as an integral component of the oil and gas, and, indeed, energy industries generally. In particular, it might be concluded that the legislation, generally, merely *licenses* rather than *regulates* oil and gas pipelines.

FOOTNOTES - CHAPTER VIII

(1) Chapter IV, Section III, *supra*, at pp. 114 *et seq.*

(2) *Id.*, at pp. 114 *et seq.*

(3) *Id.*, at pp. 117 *et seq.*

(4) *Id.*, at pp. 122 *et seq.*

(5) *Id.*, at pp. 127 *et seq.*

(6) *Id.*, at pp. 130 *et seq.*

(7) *Id.*, at p. 131.

(8) *Id.*

(9) Chapter V, Section I, *supra*, at pp. 147-9.

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